DOCUMENT RESUME

ED 145 768 HE 009 350

AUTHOR Brown, Charles I., Ed.
TITLE Report Card. Functional Models of Institutional Research and Other Selected Papers.
INSTITUTION North Carolina Association for Institutional Research.
PUB DATE 77
NOTE 79p.; Papers presented at the Annual Meeting of the North Carolina Association for Institutional Research (4th, 1976)
AVAILABLE FROM Assistant Director, Office of Institutional Research, East Carolina University, Greenville, NC 27834

EDRS PRICE MF-$0.83 HC-$4.67 Plus Postage.
DESCRIPTORS Case Studies; Conference Reports; Data Processing; *Decision Making; *Higher Education; *Information Systems; *Institutional Research; Legislators; Models; *Politics; Private Colleges

ABSTRACT

Presentations are on the five topics of functional models of institutional research: (1) and the political scene; (2) at public and private colleges and universities; (3) for improving communications between institutional researchers and data processors; (4) for deriving qualitative decisions from quantitative data; and (5) for special interest purposes. Contributors are: Henry R. Frye; James W. Firnberg; Ralph B. Kornegay; Mark L. Perkins; Sadek S. Youssef; Koosappa Rajasekhara; Evans C. Harris, Jr.; Nancy L. Beck; Robert E. Reiman; Ben H. Romine; Edwin R. Chapman; and Stephen H. Ivens. Appended are the constitution and bylaws of the association and its financial report and directory. (MSE)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED145768

REPORT CARD

FUNCTIONAL MODELS OF INSTITUTIONAL RESEARCH

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
North Carolina Association for Institutional Research
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM.

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

and other SELECTED PAPERS

Fourth Annual Meeting of the North Carolina Association for Institutional Research

HE009380

Charles I. Brown, Editor

1976 Greensboro 1976

PUBLICATIONS OF THE NORTH CAROLINA ASSOCIATION

for

INSTITUTIONAL RESEARCH

****

1973 Inaugural Proceedings of the North Carolina Association for Institutional Research (Chapel Hill)

1973 The Institutional Research Practitioner: Problem, Processes and Procedures (Charlotte)

1974 - Long Range Planning, Attrition-Retention and Graduate Follow-up Studies (Winston-Salem)

1975 - REPORT CARD: Enrollment Projections (Boone)

1976 - REPORT CARD: Functional Models of Institutional Research (Greensboro)

Requests for copies of Proceedings still available should be directed to Dianna B. Morris, Assistant Director, Office of Institutional Research, East Carolina University, Greenville, North Carolina 27834. If out of supply, copies of the following titles may be obtained from ERIC Reproduction Services, Post Office, Bethesda, Maryland 20014.

1973 - Inaugural Proceedings of the NCAIR, ED 122672

1973 - The Institutional Research:..., ED 098858

1974 - Long Range Planning,..., ED 118049

1975 - Enrollment Projections, ED 129149

1976 - Functional Models of Institutional Research

Copyright (c) 1977 by the

North Carolina Association for Institutional Research

1976 - OFFICERS AND COMMITTEES - 1976

of

THE NORTH CAROLINA ASSOCIATION FOR INSTITUTIONAL RESEARCH

****

EXECUTIVE COMMITTEE

Thomas H. Stafford, Jr., President, North Carolina State University
Robert E. Reiman, Past President, Appalachian State University
Donald J. Reichard, Vice President, University of North Carolina - Greensboro
Dianna B. Morris, Secretary, East Carolina University
Ben M. Seelbinder, Treasurer, Wake Forest University
Marjorie H. White, Member-at-Large, North Carolina A & T State University
Julian C. Wingfield, Member-at-Large, Department of Community Colleges

PROGRAM PLANNING COMMITTEE

Donald J. Reichard, Chairman, UNC - Greensboro
Robert L. Hester, Jr., Local Arrangements Chairman, N.C. A & T
Marjorie H. White, Displays Coordinator, N. C. A & T
Judie G. Bolte, Secretarial Coordinator, UNC - Greensboro
George Breathette, Bennett College
James E. Garner, Greensboro College
Harvey Gunning, Guilford Technical Institute
Kenneth L. Harper, Elon College
Cyril H. Harvey, Guilford College
Koosappa Rajasekhara, Barber-Scotia College
Ben H. Romine, Jr., UNC - Charlotte
Carlos P. Surratt, Surry Community College

MEMBERSHIP COMMITTEE

Dianna B. Morris, Chairman, East Carolina University

Remaining Membership of NCAIR

NOMINATING COMMITTEE

Allen Barwick - Chairman, University of North Carolina General Administration

DRIVE-IN CONFERENCE COMMITTEE

Thomas H. Stafford, Chairman, North Carolina State University
Donald J. Reichard, University of North Carolina - Greensboro
Marvin H. Gehle, North Carolina State University
Robert E. Reiman, Appalachian State University
Dianna B. Morris, East Carolina University
Ben M. Seelbinder, Wake Forest University
Marjorie H. White, North Carolina A & T State University

REPORT CARD - FUNCTIONAL MODELS OF INSTITUTIONAL RESEARCH
****

TABLE OF CONTENTS

PREFACE i

REPORT 1 - ... AND THE POLITICAL SCENE

What Every Legislator Wants to Know About Higher Education, But Doesn't Know How to Ask - Henry R. Frye 1

Institutional Research Lessons Learned Through Hard Experience - James W. Firnberg 6

REPORT 2 - ... AT PUBLIC AND PRIVATE COLLEGES AND UNIVERSITIES

Interest Assessment Among Potential Adult Continuing Education Clients: A Study in Futility - Ralph B. Kornegay 11

An Interactive Student Enrollment Model for the Hewlett Packard 2000 - Robert E. Fry 14

Virginia Information Exchange Procedures: Pressures and Concerns - Mark L. Perkins 20

The Impact of Fayetteville State University's Factbook on Its Community - Sadek S. Youssef 21

Institutional Research in Private Colleges - Koosappa Rajasekhara . . 23

REPORT 3 - ... FOR IMPROVING COMMUNICATIONS BETWEEN INSTITUTIONAL RESEARCHERS AND DATA PROCESSORS

Toward Improving Communications with Data Processing Users - Evans C. Harris, Jr. 25

Communication Between Institutional Research and Data Processing: An Institutional Researcher's Point of View - Mark L. Perkins . . . 28

REPORT 4 - ... FOR DERIVING QUALITATIVE DECISIONS FROM QUANTITATIVE DATA

Institutional Research in 1984 as Viewed by ETS - Nancy L. Beck . . . 30

Academic Staffing Model 1.3 - Robert E. Reiman 42

Institutional Research in a New Key - Ben H. Romine 48

REPORT 5 - ... FOR SPECIAL INTEREST PURPOSES

Getting an Institutional Research Office Started - Edwin R. Chapman .. 53

Institutional Research and the College Board - Stephen H. Ivens 56

APPENDICES 57

A. Constitution and By Laws

B. Financial Report

C. Directory

PREFACE

****

Nursed by Robert Reiman, the first president of the North Carolina Association for Institutional Researchers, in its first two years of existence to a state of promising viability, the helm of NCAIR was next assumed by Thomas Stafford and it has been under his leadership that the Association has "come of age" and that the promise has been made real. If proof is needed that NCAIR has indeed "come of age" and that the promise of viability and expectations of many has been made real with the convening of its Fourth Annual Meeting in Greensboro, then we would offer as evidence of this rather bold, but nevertheless self-assured, proclamation, the several papers that comprise these Proceedings - Proceedings that were marked by an impressive array of firsts but that are apt to go unnoticed. An unnoticability that is due primarily to the inherent nature of these and/or any other Proceedings to adequately convey the pomp and circumstance of the meeting if unaccompanied by a word of background.

None of us will soon forget that 1976 was not only a presidential election year, but an election year where many other lesser political offices were up for grabs as well. With this thought in mind and in exercise of commendable foresight as to who among the local politicos, would emerge victorious in the November 2nd balloting, the Program Committee was not only prophetic but was also sufficiently persuasive to inveigle not one, but two duly re-elected officals to grace its rostrum - North Carolina Senator, the Honorable Kathy Sebo from Guilford County and North Carolina Representative and Member of the House Committee on Higher Education, the Honorable Henry E. Frye. It is, therefore, almost needless to say that this triumph was the most politically celebrated pair to ever accept an NCAIR invitation and thereby made for the unveiling of the most auspicious first of the meetings.

In his maiden speech to an NCAIR audience, the Honorable Henry E. Frye made use of the topic: "What Every Legislator Wants to Know About Higher Education, But Doesn't Know How to Ask", and gave vent to some of his feelings on long-range planning, fiscal constraints and cost comparisons, the need for job-training to coincide more closely with job-availability, and the need for a more simplified mode of reporting objective data from college and university institutional researchers if informed legislation is to be enacted.

Following Representative Frye's speech, a veritable parade of other notable firsts winded their way to the lecturns and podiums of general and special interest group sessions. Heading the list of these names would, without question, be that of James W. Firnberg. The first claimed by Jim Firnberg is that he is the first "sitting" president of the Association for Institutional Research to address an NCAIR assemblage.

I recall that at the inaugural ceremonies of NCAIR, a telegraphed message of congratulations and well-wishes had been received from James Sutton while he was still in office; and that Jim Montgomery, a past-president of AIR was in

attendance at our second annual meeting in Winston-Salem, and was one of our featured speakers at our third annual meeting in Boone, so with the coming of a real live sitting president, the organizational hierarchy of AIR had been scaled and NCAIR had scored its second major first of the day. But what is more Jim Firnberg could not have come at a propitious moment because Jim, along with a score or more national educational leaders, had come almost direct from recently held meetings with the then Secretary of Health, Education and Welfare, David Matthews and included along with his remarks on "Institutional Research Lessons Learned Through Hard Experience" some additional lessons he had learned from Secretary David Matthews relative to the role institutional researchers should put into effect to help stem the ever increasing paper-tide rolling out of Washington, D.C. into the several thousand of offices of institutional research across the country. These two addresses have been placed along side each other in REPORT CARD 1 because the political strain invoked by President James F. Firnberg is compatible in more ways than one, with the theme and tenor utilized earlier in the day by the Honorable Henry E. Frye.

REPORT CARD 2, - Functional Models of Institutional Research at Public and Private Colleges and Universities is primarily a showcase of institutional research projects underway at selected schools. Most interesting, however, is that of the five inclusions, three of the papers are by authors new (another first) to these Proceedings. The three newcomers and their offerings are Ralph B. Kornegay's "Interest Assessment Among Adult Continuing Eduction Clients: A Study in Futility," Mark L. Perkins' Virginia Information Exchange Procedures: Pressures and Concerns," and Sadek S. Youssef's "The Impact of Fayetteville State University's Factbook on its Community." These three are joined by Robert Fry who always has an interesting model for consideration about students and as always too Koosappa "Raj" Rajasekhara focuses his attention on institutional research and the developing private colleges.

REPORT CARD 3, - Improving Communications Between Institutional Researchers and Data Processors continues a theme begun at the NCAIR 1976 Summer Drive-In Conference held in Quail Roost. The authors of two seeming common-sensical papers presented in this section are a first effort for Evans Harris of East Carolina University in these Proceedings, while Mark Perkins of Old Dominion University, already mentioned about as a first-time contributor, underscores his debut with a second entry. Choosing pretty much the same line of reasoning, Harris and Perkins offer a prescription that would substitute understanding and cooperation for internecine strife between institutional research personal and data processors.

REPORT CARD 4 Deriving Quantitative Decisions from Quantitative Data is easily the most speculative and imaginative segment of the Proceedings. In the first of three papers in this section, "Institutional Research in 1984 as Viewed by ETS" Nancy Beck begins her piece with graphic but succinct description of some of the many tests, etc., that are sponsored by ETS. However, Nancy was quick to inform us that ETS "ain't all tests". In addition to tests, ETS is into things such as studies having to do with policy making at the state level, departmental effects and student achievement, faculty development programs, the HELIX Package and many, many more things. Beyond the use of a common future date, 1984, Nancy's conclusions were far from Orwellian, offering instead,

I would sum it up, the sole purpose of ETS is the improvement of the educational process and that the products of ETS if used beyond the collecting and storage stage would materially enhance qualitative planning and decision-making. In line with a theme begun earlier, the enumeration of firsts that distinguishes these Proceedings, this was actually the second NCAIR Annual Meeting attended by Nancy Beck. At the Charlotte Meeting, Nancy was hied away in one of our little display corners, but this time around she was moved to center-stage and she responded with a very large and thoughtful contribution.

The second contribution in this section, "Academic Staffing Model 1.3" by Bob Reiman, describes a simulation that can be used to investigate an infinite number of alternatives that can be taken in the allocation or reallocation of faculty personnel among disciplines, colleges, and/or programs. Every model, as Bob points out, has its limitations, one real advantage of Academic Staffing Model 1.3 as proposed is that qualitative decision-making will be enhanced by drastically minimizing the pair associated with will-nilly manipulation of faculty/staff personnel.

The concluding piece in this section, "Institutional Research in a New Key," is not only a first contribution by Ben Romine to these Proceedings, it is also the first paper that has been solicited for inclusion in these pages that was originally prepared for another conference. At my behest Ben jotted down some of his ruminations for presentation at the 1976 Southeastern Conference on Institutional Research. So taken were Ben's hearers in Atlanta that I implored him again for permission to reprint his remarks for the benefit of NCAIR readers.

"Institutional Research in a New Key", is a beautifully done philosophical treatise that has as its overriding premise that changed and changing times have altered the role of institutional research and that these changed circumstances should be accompanied by an ever changing perspective. True, but how might this be done? The substance of Ben's response to this query is that coping with the need for a new perspective (a new key) lies not a too hasty abandonment or neglect of the current or conventional role of the institutional researcher but rather through a broadening of our horizons via the addition of a new reading regimen to our old or more accustomed reading fare. A process, slower than perhaps many would like, nonetheless Ben stoutly maintains that this gradual acquisition of a new perspective will in time enable the institutional researcher to provide newer and more qualitative solution to the many questions - present and future - that do not lend themselves to statistical treatment.

REPORT CARD 5 includes two presentations that caters primarily to the "newcomer to institutional research" and the more practical minded among institutional researchers. For the "newcomer to institutional research" Ed Chapman contributes some timely hints and advice in a piece entitled "Getting an Institutional Research Office Started." This effort is backed up by Steve Ivens' "Institutional Research and the College Board" for those on the look-out for admissions, recruitment, etc., packages and services of proven value.

In accedance to several suggestions as to how this document could be an even more valuable source of reference, these Proceedings conclude with three appendices; the November 1976 revised Constitution and Bylaws of NCAIR, a

statement regarding the financial status of the association, and a directory of the membership that goes beyond name, title, address and telephone number to include the area of specialization of each member. With the inclusion of these appendices, the Executive Committee and I are hopeful that your informational quests and convenience will be better served.--Lastly, I would again like to express my gratitude to the officers and membership of NCAIR for a job excellently done in the planning and presentation of the Fourth Annual Meeting of NCAIR and for their assistance in the preparation of these Proceedings.

Charles I. Brown
Fayetteville State University
May, 1977

REPORT CARD 1 - FUNCTIONAL MODELS OF INSTITUTIONAL RESEARCH
...AND THE POLITICAL SCENE
* * * * * * * * *

WHAT EVERY LEGISLATOR WANTS TO KNOW ABOUT EDUCATION, BUT DOESN'T KNOW HOW TO ASK

The Honorable Henry E. Frye
North Carolina Representative from Guildford County
and
Member of the House Committee on Education

Most of the time right after an election, persons elected to political office usually go off somewhere to relax, have fun, and in general to try and forget the arduous campaign they have just come through. I have been told that following a victorious campaign a cowboy type legislator took off after his winning efforts and went to Las Vegas. While in Las Vegas relaxing, frequenting the saloons, where he always wanted to imbibe a wee bit too much, I am further told that on one occasion as he came out of one of his favorite watering holes he noticed a farmer getting off his mule drawn wagon and decided that he would have a little fun. So pulling out his six shooter and aiming it at the farmer he said, "Have you ever danced just for the fun of it?" The farmer looked at him and said, "Well, no I haven't." "Well," said the legislator, "you are going to dance tonight," and he immediately commenced firing at the farmer's feet. And as you may well imagine the farmer did a beautiful dance, about as beautiful a dance as you would ever want to see, but soon all the ammunition was gone and the farmer immediately sizing up the situation reached up on the wagon and pulled down his shotgun. Pointing it at the legislator, he said, "Have you ever kissed a mule?" The legislator looked down the barrel of this shotgun and sobering up a bit he said, "Well, no I haven't, but I've always wanted to."

Well, I could say that I have always wanted to speak to the North Carolina Association for Institutional Research but that would not be true because I had never heard of the organization before being contacted by Kathy Sebo and Don Reichard. I can say, however, that I am glad to be here as a representative who did win in yesterday's election rather than an ex-representative. Nonetheless, the thought persists that anyone with no more sense than to accept an invitation to speak on the day after an important election should have his head examined. As a matter of fact my acceptance of this invitation may be reflective of the fact that there are no educational qualifications for legislators. But to the extent that my acceptance suggests the absence of legitimate other things to do, the range of choice before me now is to either speak, dance, or kiss a mule.

Lest your expectation get out of hand, my choice is to speak, but surely "What Every Legislator Wants to Know About Education, But Doesn't Know How to Ask?", the topic given me to speak on, suggest something a bit out of the ordinary? Is it that we don't have sense enough to ask the questions that we want to ask? Or that we are too polite to ask? Or is it something else of which I am not quite sure? Then too, I am not at all sure that I can talk

intelligently about what every legislator wants to ask, and the reason for that, of course, is that I have not taken a bicameral poll on the subject. So what I would like to do, if I may, is to begin by sharing with you some of the fruits of a reading program I have subjected myself to most recently.

My reading for this occasion was assisted by Don Reichard, your program chairman. Don was kind enough to furnish me with a 1970 Carnegie Commission on Higher Education study and/or survey entitled State Officials and Higher Education. This particular survey reports the answers given to a series of questions that were asked of top legislative officials in nine states that had varying patterns of organization in higher education. And so interesting did I find this reading that I would like to share with you some of the conclusions reached by the author of the Carnegie report.

The first conclusion reached was the manifestation of a great faith in higher education in the United States, on the part of the legislators queried. Demonstrative of this great faith was the 300 percent rise in the financial support of higher education during the 1960's . The second related to an acute awareness on the part of parent-constituents of the need for even more educational opportunities for their children. A third conclusion was the recognition of an intense interstate competitiveness for prestigious colleges and universities as a major indicator of a state's progress. The legislators also evinced a favorable attitude toward long range planning of higher education and centralized coordination as a means of making good use of resources and of expressing the will of the state government. The legislators as a whole welcomed federal aid to higher education but included the proviso that the monies received should be spent through the machinery of state government.

Some additional conclusions reached were that state legislators were in strong support of community colleges; but held an attitude of caution toward state support for private colleges and universities; evinced a substantial degree of understanding of student dissent, an understanding that was coupled with a clear preference for a firm hand in dealing with student dissent; and viewed the support of higher education as being among their highest legislative duties or responsibilities.

Mention was made of the foregoing study and the conclusions drawn from it because it seems to me that a similar type study might be an appropriate undertaking by the North Carolina Association for Institutional Researchers. In pursuit of this tack a bit further, as a legislator, some questions that I would like to know, not only about higher education, but education in general are: How do we get reliable and unbiased information? Where are we going in higher education? What are the relationships between public secondary education and the community colleges?

Another question, I would pose, focuses upon the salary differentials among persons at the various universities in the state's education system. Legislators, in my view, would be interested in are the reasons why salary levels differ so drastically in the teaching profession between elementary and secondary schools and in post-secondary institutions such as the technical institutes, the community colleges and between the 16 institutions that comprises The University of North Carolina system? Mention of The University of

North Carolina system bring to mind that legislators would also be interested in are the reasons behind the difference between the cost on one campus and that of another for the same services? A related question within The University of North Carolina system, would require information that centers upon the real comparative costs of educating students working for undergraduate degrees andthose working for graduate and professional degrees. When I say costs, Iam referring not only to what the students pay who are attending college, in this instance I am also referring to the amount it cost whoever pays the bill for services rendered by either the public colleges and/or the private colleges.

During the budget discussions of the House Committee on Higher Education we get a lot of information from and about the various publicly supported institutions of higher education in the state, however, despite the volume of information received some nagging questions still persist. We know, for example, that it cost more to produce a Ph.D. than an undergraduate degree in terms of per student allocation, but where do we need the better teachers and what should be the qualifications for teachers at various levels? We also always manage to wonder, in a cost-instructional effectiveness sense, what should the teacher-student ratio be at the various levels of higher education? Another question that I would like some good unbiased information on, is the relationship between the number of students trained and the availability of jobs or positions? Along this same line, it seems to me that we are talking about the relationship that exists between those who employ the graduates of our institutions of higher education and those who produce the graduates. We know that in some areas, let's say Russia for example, where the government determines how many engineers, etc., are needed and then directed to these jobs. Obviously very few of us feel that this kind of governmental determination would be appropriate to the United States, but we do have a question about the extent reliable information about job opportunities is available to curriculum planners and vocational counselors at the various institutions. In this sense how much real attention is given to training people according to the availability of jobs?

Another concern of the House Committee is, to what extent is a test or a course grade a measure of what a person has accomplished or of his readiness to move from one level to another within the university system or to move out into the world-of-work and perform at a creditable level. I noticed in the paper not too long ago an article that noted that on at least one campus of the university system students were making higher grades than their predecessors, the article then went on to ask whether this was because today's students are much better prepared than were the students of yesteryear, or whether it is because of grade inflation, or because we are permitting students to drop courses without receiving a bad grade after they have had half of the course. This type of information, I feel, is needed for the university as a whole and not just for one particular campus of the university.

Licensing is another concern that has developed over the last few years. Formerly licensing standards rarely extended beyond the legal and medical professions. However, recently we have passed bills for the licensing of landscape architects, auctioneers, and engineers. And what is more we have a bill

tnat will be coming up for the licensing of nurses and a number of other professions. To what extent should all professions be licensed? Or to state it another way, to what extent are all of these fields really professions? You can play that one either way depending upon your own feelings. But we will be making decisions on this type of thing . Another question that continues to occur in the professions for which we now have licensing, is whether the several institutions of higher education should license the neophyte professional or should a separate board pass on his licensing by mean of a separate test and other licensing requirements?

The final concern that I want to mention is, where are we going in the area of private versus public education? The only way that I know of that we could feel comfortable with the comparative figures on this question would be if the figures were drawn up jointly in the private and public college and university sectors.

Obviously figures do not lie, but you can take figures and make them say almost anything you want them to if you are skillful enough. As previously mentioned we get reports from both the public and private sectors of higher education. Upon receipt we try to put them together and come out with an assessment of where we are, but often I'm not sure that we really know. Somehow we need to be able to get together and say we've agreed that this is the situation. I think this type of agreement would help us in making some very crucial decisions in the whole area of higher education. If we could agree on the facts we would not be focusing simply upon whether we should support higher education, more germane to your present situation is to focus on is where the support is needed and what forms that support should take.

Let me close by saying just a few things about the nature of the General Assembly and its work. First of all, in North Carolina, as you all know, we do not have a governor with veto power. Now with this being the case when a bill pertaining to higher education will have completed its round of the House and State Committees on Education and is recommended for passage into law - then this is pretty much what will happen, the bill will be passed into law. In other words, when the House and Senate committees finish their work on a bill there is no sending it to the governor to have it analyzed again and/or a second determination made as to whether the bill should be submitted to the floor, under our present constitution the bill after committee deliberation will be submitted directly to the floor for passage into law.

A second thing that I would like to say about the General Assembly, is that all of us who make up this body are not without our special interests. All of us are what is known as citizen legislators. This means that we do not make our living as legislators - we make our living doing something else and serve in the legislature on a part-time basis and at a sometimes heavy cost in time and financial stability. As such, legislators in both houses are forced to vote without always being completely informed as to the particular matters on which they are voting. Where then does that lead us and what are some suggestions that relates to our needs for information? Take for example a matter that will be coming before the General Assembly shortly-the licensing of social workers. On the day of the hearing a few like Kathy Sebo will have studied it

completely and know all the questions and so forth, but most of the legislators will come to the committee meeting that day without having read the bill and without having read very much background materials on it. We listen to the presentation and we may give the matter some very deep study or we may not. But be that as it may, it is at this very critical moment that those of us on the committee will have most need for any information that you may send so that we might hurriedly inform the legislature members who have not read as fully as they might have of the merits of the bill and gain their votes.

If I have been somewhat overly realistic in my utterances immediately above, as to the extent and when we read the information you may send, let me hasten to add that as part-time citizen-legislators our time in the General Assembly is all too brief to read everything, but that we do read as much as we can and that you can help us read even more profitably if you would do least two things. Number one, we need all the information that is available on a speedy basis. In other words, if a particular bill is coming up for discussion the next day all of a sudden I might see a question coming up and I think, "Boy, I need some background information on that!" At times such as these I need someone whom I can call and get the information that night or at the latest the very next morning. In the event that I can get the information I will read it the night before or the morning of the committee meeting and thereafter go to the committee meeting feeling real intelligent.

The second need is that the information be kept simple. I know that very little, if anything, is simple these days, but the plight of the citizen-legislator is such that save for the most studious and fastest speed readers among us, we simply don't have the time to read a succession of fulsome reports. In other words if the materials you propose to send to the House Committee on Education is going to be long, complicated and with a lot of detailed charts and figures so small that those who are a little nearsighted will have to get a magnifying glass to read it, then only the studious are going to really look at the report a second time. The citizen-legislator needs something that is fairly simple. Now I don't mean that your reports have to be eighth grade, but on the other hand it should interest you to know that the preferred format of materials received is that a summary be put forward first followed by the inclusion of the supporting and/or more complicated details in later pages.

A final preference of legislator that I would recommend to your use, is that whenever you send materials to which you want thoughtful attention given, is the preparation of a set of questions that your material is most likely to evoke in the minds of your legislators and the answers to these planted questions. This kind of preparation, not only simplifies the study process, it speeds-up the study process, makes it more precise, and adds a measure of objectivity. This kind of preparation is not easy, But in the main, if we had the kind of information I have described on hand before the House on Education Committee meets and again before the report in question will be taken up on the floor of the Assembly, the techniques, albeit sketchily presented above, will really help to make a difference in the passage or defeat of an education bill.

In concluding these remarks, may I say that I am hopeful that I have been at least partially helpful in identifying some of the questions that legislators "want to know about education." I would further like to call upon the assistance of the North Carolina Association for Institutional Research to provide me and my fellow citizen-legislators not only with the answers to the questions posed this morning, but the answers to the many other educational vexations that have long plagued the General Assembly and the people of this great state.

INSTITUTIONAL RESEARCH LESSONS LEARNED THROUGH HARD EXPERIENCE

* * * * * * * * *

James W. Firnberg
President of the Association for Institutional Research
and
Coordinator of Institutional Research
Louisiana State University

Before I get into the assigned topic, I must first conduct some other business relating to our continuing efforts to reduce the burden of reporting to the federal government.

The Association for Institutional Research has been very fortunate over the years to have had considerable input at the federal level. Much of our current input is because of Joe Sutton, Vice President at the University of Alabama and former AIR president, and his contact with David Mathews. Currently HEW Secretary Mathews is on leave from his post as President at the University of Alabama. If any of you were at the AIR Forum in Los Angeles, you know of Dr. Mathews' concern for reducing the federal reporting burden of higher education. In October Dr. Mathews put together an advisory group composed primarily of institutional researchers and business officers to assist in the development of a plan to reduce the burden of reporting. This group spent several weeks in Washington trying to develop a work plan on recommendations to reduce the burden of federal reporting.[1] Secretary Mathews has asked those of us who were on the work group to get as much publicity out as we could and to enlist as much help as we could in putting pressure on the federal government to do something about reducing the paper work in higher education. What I would like to do now is quickly give you the major recommendations which we have made to the Secretary.

1. The Inter-Agency Task Force should suggest a single agency within the Government to be designated as the collector, disseminator, and repository for all general information statistics for higher education. This agency should have the necessary staff and equipment to process the data inputs and to provide retrieval systems with the capability of furnishing such data to all users in a timely fashion.

2. The Task Force should require all Federal Agencies currently collecting data from institutions of higher education to examine all required reporting in terms of appropriateness, necessity, reasonableness, and duplication.

3. The Task Force should identify immediately, as an interim measure, the duplication in the reporting required of institutions of higher education, and develop procedures which will eliminate duplicative paperwork for respondents.

---

[1]Later an Interagency Task Force was appointed to deal with this matter.

4. The Task Force should review the processes by which administrative regulations and reporting requirements are imposed on institutions of higher education.

5. The Task Force should request the Office of Management and Budget to more clearly identify the real "burden" on institutions of higher education.

6. The Task Force should recommend extension of the cognizant agency concept in order to reduce overlapping and conflicting regulations among agencies.

7. The Task Force should, throughout its deliberations, search for ways in which the federally imposed burden on small institutions can be alleviated.

8. The Task Force should define the responsibility of the Federal Government for providing assistance to institutions in meeting the requirements imposed by statutes and by regulations.

9. The Task Force should endorse the principle that when higher education does have generally accepted standards and definitions (for example, financial accounting), such standards be accepted by Federal agencies in the process of developing requirements for record keeping and reporting. When generally accepted standards are not in place, institutions should be consulted prior to the imposition of regulatory requirements.

10. When there is a clear need for special information for the legislative or executive policy and decision-making processes, the Task Force should assure the use of proper sampling techniques, one time rather than recurring surveys, voluntary rather than mandatory approaches, cooperation with professional associations, or techniques designed to minimize data collection.

11. The Task Force should assemble the antidiscrimination regulations and streamline redundancy to the extent possible by the Executive Branch, and prepare legislation necessary to efficiently consolidate those areas which cannot be dealt with administratively.

12. The Task Force should determine the extent to which evaluations have been made of the usefulness of the institutional record keeping requirements entailed in the Federal time and effort reporting and in documentation of cost sharing.

13. The Task Force should request IRS to permit private institutions to submit HEGIS financial data to IRS in lieu of Part II of Forum 990, as they had done prior to the change in IRS practice.

14. We commend to the attention of the Task Force OMB Circular No. A-110 establishing simplified administrative requirements for grants.

15. The Task Force should make two or three case studies of the unusually burdensome reporting requirements which have been imposed directly by legislation and which therefore are not amenable to relief by administrative action.

There were a total of fifteen recommendations and I won't go into detail about them, but I do have a handout for you. If you feel that you can support any of these recommendations, would you please write to the Chairman of the Task Force, Bob Wright. His address is on the handout. Write or call him and specify any concrete examples of burdens as you can see them. If you check with Don Reichard, he will show you a six page letter which does a beautiful job of explaining what burden really is. Secretary Mathews feels that the only way we can accomplish reduction is to put pressure on the federal government to do it. Individuals and institution presidents, this organization perhaps, must get a letter writing campaign going. Maybe then can we get down to what we ought to be doing in institutional research.

My assigned topic was "Institutional Research Lessons Learned Through Hard Experience." It is quite easy to look back over the past thirteen years and see what we did, speculate about how we should have done it (all of us have 20/20 hindsight), and then recommend a course of action to others. My remarks will be built around seven main points. I don't think that you'll have difficulty identifying them.

While my association in institutional research has been for over thirteen years, the first three of those were when as assistant registrar for institutional research I really was an assistant registrar and my office was responsible for institutional research work as well as some registrar's functions. We did class schedules, room assignments, grade distribution studies and the typical kinds of things normally associated with the registrar's office in addition to some institutional research. The facilities inventory expanded into faculty workload study and then that developed into doing studies of salary and finally fairly complex management studies. If you remember The Managerial Revolution in Higher Education (Rourke and Brooks, 1966), they talked about in the 1950's only very few offices of institutional research could be identified. I don't know if they identified ours or not, but it has been in existence since 1952.

1. If I had it to do over again, I don't know if I would have done things too much differently. We moved from the registrar's office to an institutional research office combined with some registrar's functions (it really sounds like a weird organization, and it was). I think that if I had to do it over again I might have second thoughts about which functions should an office of institutional research perform. We did it the way we did because of personnel. The people we had were very capable, very loyal, and had been with it a long time. Well, it didn't work out to the best advantage of everybody, so perhaps if it were to be done over again we might have paid closer attention to the functions that the office of institutional research performs and try to have

some assurance that those functions are really the functions that should be performed. Given the same set of circumstances that we had ten years ago when we had to make that choice, I would probably make the same decision, but hindsight is a great thing.

2. I really think it is a waste of the optimum advantage of institutional research to establish and maintain files, computer or otherwise. Now I say that with a little bit of reservation since if you don't establish the files you will not have an awful lot to say about what goes into that file. We are responsible for the maintenance of the facilities and curriculum inventory files, two that I wish I could get rid of but that nobody else will take. One of the files that we don't maintain is a personnel file. We raise hell from time to time to be sure the file has in it what we need and to make sure that it is an accurate file, but I don't think we have any business establishing it or maintaining it concerned with payroll, students, courses, admissions, etc. We have been very fortunate in that most offices in the University are very sensitive to our needs. By not controlling the file itself, I think you have to have some degree of assurance that you have total access to those files.

3. A question that is constantly coming up is how to gain visibility and that is something that is not very different to do. You can gain visibility by getting involved! Anytime you have a self study coming up they are going to need data. The office of institutional research can provide an invaluable service to the academic planning committee. Those folks need all sorts of information which you can provide . . . and that is one way of gaining visibility.

Another way is getting some studies from other institutions, erasing the name of that institution and the data, and then filling in the blanks for yourself and issuing the report. That is the way many of us have gained visibility. So you can gain visibility in a hurry by "borrowing" somebody else's idea. You gain visibility by being a hell raiser, writing poison pen letters and this kind of thing. Data processing on the campus and I have been known to tie up from time to time. I guess maybe we have developed some sort of an unholy alliance, because of a common cause, but several times we have disagreed rather violently. You can gain a reputation that way and people will know that the office of institutional research exists.

4. One thing you need to be careful about is the source of your data. Where the data come from, how accurate it is, etc. That reminds me of a question I heard somewhere. This is just so it will make sense to you.

> The Government are very keen on amassing statistics. They collect them, they raise them to the Nth power, take the cube root and prepare wonderful diagrams. But you must never forget that every one of these figures comes in the first instance from the village watchman, who just puts down what he damn well pleases. (Sir Josiah Stamp (n.d.))

Where do you get your information? You have got to have some sort of assurance that the data going into the file represents at least a reasonable estimate of what is.

5. Don't over sophisticate your studies. I think somebody talked about that today. You can get so sophisticated that nobody can understand, it doesn't really mean anything to anybody. I was in the president's office one day several years ago and we were talking SCH's and FTE's and that sort of thing and the president said, I won't quote him exactly, but he said, "You and Mr. _____ (the personnel director) talk in riddles all the time. Why can't you speak in terms that everybody can understand? He talks about jackets and regs and you talk about SCH's and FTE's and I can't understand all of that." I think today's presidents better understand, but ten years ago presidents didn't understand that. Make yourself understood!

6. Be sensitive to the planning needs and educate the people who are going to use your information. If you are not familiar with the New Directions for Institutional Research, which is a publication of AIR published by Jossey-Bass, (just thought I would get a little plug in for that), the last issue dealtwith examining departmental management. An article in there by Craig Johnson talked about this. ". . . becoming sensitized to the academic planning needs of the departments." In my opinion, you have to serve the academic departments as well as serving the administration to properly serve the institution. Find out what they need and provide it! There is a big education job in getting people to properly use the reports you produce. The place to start is with academic department chairmen. I firmly believe that if you don't start with the lowest level of management, the academic department, you can have all the management in the world at the vice presidential or presidental level and you can have a poorly managed institution. The departments determine the quality, how much it costs to do business, etc. and these are the people you have to educate.

7. The other point I want to make, and this will be the last, deals with the personnel in your office. You can't do the job by yourself! You need some inside people and you need some outside people. When I hire someone in my office I look for an inside person. There is no way in the world we can afford another outside person. After all, I have to have somebody at home to do the work while I'm here in North Carolina. Fortunately, I have a fantastic bunch of inside folks at home. My advice to you would be to find somebody that is about 180^{0} different from you. If you are an inside person, then find an outside person; then if you are an outside person, find an inside person. I won't consider hiring someone with a professional education background in my office. I'd hire an accountant. I don't know debits from credits, but I need someone who does. Get somebody to shore up your weaknesses, I don't know anything about finance, but I am a living, breathing expert because I have somebody in the office who does. So compliment your weaknesses.

It has indeed been a pleasure being with you. This is one of the finest and more active statewide groups in the country. I look forward to seeing many of you at the AIR Forum in Montreal next May.

REPORT CARD 2 - FUNCTIONAL MODELS OF INSTITUTIONAL RESEARCH
... AT PUBLIC AND PRIVATE COLLEGES AND UNIVERSITIES
* * * * * * * * *

INTEREST ASSESSMENT AMONG POTENTIAL ADULT CONTINUING EDUCATION CLIENTS: A STUDY IN FUTILITY?

Ralph B. Kornegay
Acting Director of Research
Winston-Salem State University

In late spring and early summer of 1975, the Division of Continuing Education at North Carolina State University discussed the idea of conducting an interest or needs assessment of adults as a means of producing courses which would attract new participants. As a result of the discussions, the decision was made to actually do such a survey. Work was actually begun in August, 1975, and the finished report was issued in April, 1976.

The survey, confined to Wake County, included the responses of 1,390 adults who were asked to respond to 23 separate items relating to such things as socio/ economic status, reasons for and against participation in adult continuing education, degree or certificate desired, and subject or course of interest. Of prime importance was a pair of questions relating to the amount of money the respondent would pay for a course and would they attend during the next two years if a course of their interest was offered.

The general results were as follows:

1. White citizens can be expected to participate in continuing education programs to a greater degree than blacks. Black males: 16%; black females: 10%; while males and females: 25%. There are, however, specific courses which are of special interest to each group. Overall, 14% of the population can reasonably be expected to participate.

2. The largest segment of the population which might be expected to participate would come from the group 18-54 years of age. Persons aged 55 and above do have courses of special interest.

3. Non-high school graduates report a very low interest in continuing education. Only 5% indicate interest in attending. All other educational levels indicate a higher level of intention to participate.

4. Income was found to be of very limited relationship to participation.

5. Overall, more than 70% of the respondents perceive that continuing education will have a positive effect on employment status.

6. Vocational courses were selected by the largest percentage of respondents (25%).

7. The six courses generating maximum interest were: Business Skills, Crafts, Management Skills, Investment, Gardening and Flower Arranging, and Written and Oral Communication. These were selected by between 21% and 34% of the respondents. Two of the six were in Vocational course area; two in Personal Development; and one each from Hobby and Recreation and Home and Family.

8. Eight reasons were shown to be of prime importance as barriers to participation. Five of the eight barriers are institutional by nature. They are: (a) Cost, (b) Time required to complete degree, (c) Course Scheduling, (d) Don't want to attend full-time, and (e) Courses wanted do not seem to be available.

9. Comparison of perceived barriers, cited in Number 8, with other factors in the survey indicates a lack of public understanding of continuing education.

10. Based on a predicted participation rate developed for this report, there are some 21,000 adults in Wake County who might reasonably be expected to enroll in one or more continuing education courses.

Utilization of the Data

On August 13, 1976, a letter went out from the Division of Continuing Education, North Carolina State, announcing a course in Financial Planning. The course, costing $25 and scheduled for two nights in October, was a direct outgrowth of the survey results.

Publicity was handled by sending posters to business and industry, public service announcements on radio and television, and news releases for newspapers. Net result was five enrollees and a cancelled course.

Out of a thorough examination of the results, several thoughts emerge. They relate directly to the usefulness and effectiveness of any future examination of interests.

First, no amount of research, analysis, and application will ever succeed unless a real effort is made to communicate the results to the public.

Second, course offerings based on interest surveys of the general public will fail everytime unless the course and the publicity is aimed at the general public.

Third, with the current state of public service advertising, direct mail advertising/announcement may be the more effective means of public contact.

Finally, development of courses and the subsequent publicity should be done with the survey results and survey groups as guides. To do this, the survey researcher must be involved at each stage.

Summation

The survey clearly shows that there is a vast audience out there waiting to be served. The field of higher education research is loaded with support for this contention. In spite of this, recent application clearly shows that, even armed with the survey results as a guide, the projects will fail unless developed, aimed, and publicized along the lines of the analyzed survey results. As long as this continues, we are dealing with a study in futility.

AN INTERACTIVE STUDENT ENROLLMENT MODEL FOR THE HEWLETT PACKARD 2000

* * * * * * * * *

Robert E. Fry
Director
Institutional Research
UNC-Wilmington

Educational administrators are being pressed, in this time of declining enrollments and increasing costs, to ask for more detailed reviews of their present situation and for possible alternative courses of action that they might take in the future. The mountains of statistical data that are generated by varying university offices such as Institutional Research, have been analyzed and those analyses are available to answer most of the administrator's historical questions. On the other hand, an enumeration of the potential courses of action that may be taken by an administrator is not a simple task. It is the purpose of this paper to review the steps that we have taken at the University of North Carolina at Wilmington to make this task a manageable one and at the same time give administrators more flexibility in the decision making process.

The Office of Institutional Research has, for the last several years, been working to develop descriptive models in the areas of enrollment, faculty flow and space utilization. The availability of such instruments as PLANTRAN, CAMPUS and budgetary planning models such as RRPM have been helpful in clarifying some of the interrelationships that exist between various educational variables. These models and others are available on the IBM 370/165 or on similar computing systems. Definite problems exist because these programs are in the batch mode. The following are some of the reasons why administrators have difficulty working with batch mode modelling:

1. The modelling tools are not responsive in terms of time to the administrators needs.

2. The models require intermediate personnel to put the information in machine readable format and for that personnel to have access to the computing system.

3. Batch mode increases the frequency and the number of lines of communication that must exist between administrators and the person actually manipulating the model.

4. These models give some freedom to the statistician who has responsibility for the organization of the model. This freedom could potentially introduce personal bias and influence on administrator's final decision.

In order to reduce or alleviate the above problems, Institutional Research, using the HP-2000 system, developed an enrollment projection model which could be used directly by an administrator to answer his "What if" types of questions. The following is a short discussion of that model.

Five basic groups of students enter the university each semester and each group, dependent upon credit hour loads, generate a FullTime Equivalent (FTE) to headcount ratio. Table A shows the input capability of the interactive model with respect to FTE to headcount ratios.

The first section of this program will allow you to change the FTE to headcount ratios for each of the various components of the projection model Values are already present in the model. If you want to change these values respond with the new value, if not respond with a value of zero.

TABLE A

	FTE to Headcount Ratios for	Present Value	New Value
1	Fall Continuing	.942	?.945
2	Spring Continuing	.923	?0
3	Fall Re-Enrolling	.8	?.82
4	Spring Re-Enrolling	.8	?0
5	Fall New Freshmen	.983	?0
6	Spring New Freshmen	.983	?.950
7	Fall New Transfers	.948	?.947
8	Spring New Transfers	.948	?0
9	Fall Non-Degrees	.444	?.432
10	Spring Non-Degrees	.444	?.432

An administrator has the option in Table A to accept the built-in value or to reject it and input his own value. Line numbers are used in later iterations to allow for table modification.

Each of the student groups drop out of the university at about the same rate during the semester. This is termed semester attrition and is handled in Table B similar to the way FTE to headcount ratios were treated in Table A.

The next section of this program deals with semester attrition rates. The same rules apply as applied in Table A.

TABLE B

Attrition Rates for		Present Value	New Value
1	Fall Semester	.034	?0
2	Spring Semester	.034	?0

Table C shows the current semester to semester continuation rates for regular degree seeking students. The approach to data input is the same as the technique used in Tables A and B.

The next section of this program deals with semester to semester continuation rates. The same rules apply for this section as applied in Tables A and B.

TABLE C

Continuation Rates for		Present Value	New Value
1	Fall to Spring Semesters	.843	?0
2	Spring to Fall Semesters	.727	?0

Attrition and continuation rates effect the enrollment levels of each semester and thus effect the final equated FTE which is the state's financial funding level for the institution.

In Table D, the administrator may enter his best estimate of the expected enrollment levels for each of the components of the model.

Your initial headcount estimates for each of the component items of the model are entered in the following section of the program.

TABLE D

	Student Headcounts for	Expected Number
1	Fall Continuing	?1844
2	Fall Re-Enrolling	?100
3	Spring Re-Enrolling	?135
4	Fall New Freshman	?626
5	Spring New Transfers	?25
6.	Fall New Transfers	?342
7	Spring New Transfers	?100
8	Fall Non-Degrees	?461
9	Spring Non-Degrees	?500
10	Final Equated FTE	?2842

Line 10 in Table D, the final Equated FTE, is the administrators target value.

Once the data entry portion of the program is completed an enrollment estimate for one academic year is generated.

ENROLLMENT ESTIMATES

	FTE	Headcount
Continuing Students for Fall	1742.58	1844
Re-Enrolling Students for Fall	82.00	100
New Freshmen Students for Fall	615.36	626
New Transfer Students for Fall	323.87	342
Non-Degrees for Fall	199.15	461
Total Initial FTE and Headcount for Fall	2962.96	3373
Total Final FTE for Fall	2862.22	
Continuing Students for Spring	2329.89	2524
Re-Enrolling Students for Spring	108.00	135
New Freshmen Students for Spring	23.75	25
New Transfer Students for Spring	94.80	100
Non-Degrees for Spring	216.00	500
Total Initial FTE and Heacount for Spring	2772.44	3284
Total Final FTE for Spring	2678.18	
Final Equated FTE	2818.95	
Under Enrolled	23.05	

Expected Continuing Students for the Coming Fall - 1938

Do You Want to Terminate this Program? No

After reviewing this estimate, the administrator has the option of changing any of the various variables that he has entered. The following example illustrates the use of table line numbers in making data changes and the effects those changes have upon the enrollment model.

```
Do you want to change any of the FTE to headcount ratios?  No
Do you want to change any of the attrition rates?  No
Do you want to change any of the continuation rates?  No
Do you want to change any of the headcount values?  Yes

Enter line number from Table D for the item you want to change.
When you are finished changing items, enter line number 99.

Line No. ?9
  9 Spr. Non-Degrees                ?625

Line No. ?99
```

ENROLLMENT ESTIMATES

	FTE	Headcount
Continuing Students for Fall	1742.58	1844
Re-Enrolling Students for Fall	82.00	100
New Freshmen Students for Fall	615.36	626
New Transfer Students for Fall	323.87	342
Non-Degrees for Fall	199.15	461
Total Initial FTE and Headcount for Fall	2962.96	3373
Total Final FTE for Fall	2862.22	
Continuing Students for Spring	2329.89	2524
Re-Enrolling Students for Spring	108.00	135
New Freshmen Students for Spring	23.75	25
New Transfer Students for Spring	94.80	100
Non-Degrees for Spring	270.00	625
Total Initial FTE and Headcount for Spring	2826.44	3409
Total Final FTE for Spring	2730.34	
Final Equated FTE	2845.49	
Over Enrolled	3.49	

Expected Continuing Students for the Coming Fall - 1938

Do You Want to Terminate This Program? Yes

When he feels comfortable with one year's information, he may elect to terminate the program or he may move to the next year by taking the continuing students for the next fall and entering various new assumptions about other enrolling groups.

This interactive modelling tool provides the administrator with instant unbiased answers to various enrollment questions while eliminating the need for additional interaction with personnel not directly involved in the decision making process.

The education of academic administrators to accept interactive modelling is the next step that developmental personnel must take. This process and the construction of new tools is a never ending process and we have just begun.

VIRGINIA INFORMATION EXCHANGE PROCEDURES: PRESSURES AND CONCERNS*

* * * * * * * * *

Mark L. Perkins
Assistant Director
Institutional Research
Old Dominion University

1. There is a demand on the part of state legislators for an accurate accounting of credit hour production and the expenditure of funds.

2. Management packages and information systems such as are available from NCHEMS (at WICHE) are most suitable for producing such management information for internal use at the university.

3. The implementation of such packages requires the development of comprehensive and extremely accurate data bases.

4. The development of the necessary data bases is extremely time consuming and should be begun prior to the initiation of any new system.

5. A fallacy, which is inherent in any of the management packages, is that on the surface it would appear that information which is produced by them can be compared across many institutions in a state. This, however, is not the case as the program structure, the funding structure and the organizational structure in the varied institutions may be totally different particularly with regard to the student body and college or university mission.

6. Despite the inadequacies that are pointed out and the problems that have been revealed in such packages the institutional researcher must begin to prepare for the implementation of such systems in his own organization. The sound of the time was particularly reflected by the Honorable Representative Frye from the North Carolina state legislature who insisted that the legislature is interested in comparative and comparable information from the various institutions within the state.

7. The institutional researcher must plan now for the eventual implementation of such reporting systems so that he is as knowledgeable, if not more knowledgeable of the appropriate applications and uses than those who demand the implementation of such management packages for state wide comparative purposes.

---

*Note: Pinch-hitting for Fred H. Wise, Mark Perkins was prevailed upon to recapture the main thrust of his impromptu remarks for these Proceedings. This Mark has done with clarity and succinctness in the enumerated statements below.

THE IMPACT OF FAYETTEVILLE STATE UNIVERSITY'S FACTBOOK ON ITS COMMUNITY

* * * * * * * * *

Sadek S. Youssef
Research Associate
Institutional Research
Fayetteville State University

A Brief History of Fayetteville State University's Factbook: 1970-1976

1. The first Factbook prepared under the auspices of the present administration and institutional researcher personnel was published in 1975. This first issue of the Factbook included data for the years 1970 through 1974 (5 years).

2. The second issue of the Factbook was prepared in 1976. It covered data from 1971 to 1975.

3. The third Factbook is currently under preparation, it is our hope that this issue will be ready for distribution by the Spring of 1977 to help mark the Centennial year of Fayetteville State University's founding.

Contents of the Factbook

To highlight the Factbook, several broad areas can be identified: administration, enrollment, transfers, graduates, faculty, fiscal analysis, physical plant, library, computing center, communications center, and student center. Detailed information on each area is demonstrated by graphs and tables. For example, in enrollment, students are classified by sex, class, age group, ethnic group, marital status, boarder/non-boarder, residence status, veteran/non-veteran, major, fulltime/part-time and teaching/non-teaching.

Who Receives the Factbook?

The Office of Institutional Research usually sends a copy of the book to each of the following: administrators, division heads, department heads, area heads, faculty members, Board of Trustees, Student Government Association, Planning Task Force members, library and within the state and out-of-state directors of institutional research.

In addition to the foregoing Fayetteville State University looks forward to making its Factbook available to high school counselors and to each business and industry within the community.

Impact of the Factbook

Now let me briefly discuss the impact of the Factbook on the University and the local community. As for its impact on the university community, it

provides the student with detailed information and facts not readily available in the University catalog. The Factbook is also a great help to new faculty members, administrators and staff as it gives them a clearer picture of the various aspects of the institution. The value of the Factbook to the committee and administrators in reporting, planning and decision making cannot be overlooked. With regard to its impact on the local community and the Factbook plays several roles in the community. It clearly points out the various programs offered by the institution, the organization of the university, the composition and qualifications of its faculty, budget, enrollment and facilities such as library, computing center, etc. Such information demonstrates to the community the tremendous impact of FSU on its economy. It also encourages the various agencies in the community to make use of the university facilities and its human resources. Accordingly, it is expected that the local community will continue its support of the institution on an ever increasing scale.

The data included in the Factbook is also designed to attract high caliber students, faculty and staff. In a more general manner of speaking, the Factbook can serve as instruments by which ideas may be exchanged among institutions. In offer of some explanation of this point, I am pleased to mention that some research directors in other institutions were so impressed by FSU's Factbook that they were moved to express their interest in using it as a model in preparing their own Factbooks.

INSTITUTIONAL RESEARCH PROJECTS IN PRIVATE COLLEGES

* * * * * * * * *

Koosappa Rajasekhara
Director
Institutional Research
Barber-Scotia College

Historical Background

Institutional research at private colleges, particularly at 4-year colleges is very young. Few offices have existed beyond five years. Those which are older than five years tended to have existed as a part of either a registrar's office or president's office, that too for the purpose of reporting to the state and federal governments. Thus, there was a limited orientation to the exact functions of the I. R. Office.

Major impetus towards the establishment of the Office of Institutional Research came through the funding under Title III--Basic Institutional Development Program (BIDP). This enabled the developing institutions to move towards (1) the formulation and implementation of better administrative decision-making processes; (2) the development of mechanisms for monitoring the progress and achievements in meeting the established goals; and (3) the establishment of a data base reflective of its past, its present, and its future plans.

A number of intensive workshops were conducted during the summers and academic years under the auspecies of the Institute for Services to Education to train individuals heading the I. R. offices in these institutions.

I.R. Projects at Barber-Scotia College

Since the inception of the I.R. Office at Barber-Scotia in July, 1974, the following major projects were completed:

1. Publication of Fact Book (10 year)
2. Establishment of Data Base on Students, Faculty, Physical Facilities, Degrees, Libraries, Financial Aid, etc. beginning 1974-75
3. Graduate Follow-up Study (1970-75)
4. Student Attrition
5. Evaluation of Entry Level Program
6. Instructional Space Utilization
7. Recruitment Survey
8. Freshman Profile

9. Summer School Survey

10. Teacher Load Analysis

11. Summer Activity of Returning Faculty

12. Grade Analysis of the Students

13. Instructional Course Load Matrix

14. Academic Cost Effectiveness Study

15. Publication of I.R. Digest

In addition to the above studies, the Office of Institutional Research prepared several reports to the President. Also, the office coordinates the submission of reports for the state, federal and other agencies.

As a result of the establishment of the Office of Institutional Research at Barber-Scotia College, the following improvements have been made:

1. Centralization of all research and reporting activities within the institution to serve as a "clearing house."

2. Maintenance of an up-to-date data base.

3. Initiation of studies on problem areas identified by the administration and/or faculty.

4. Self-initiated projects for the needs of the institution.

5. Maintenance of a reference library on higher education and submission of abstracts on key issues of higher education to the administrators and directors of the centers.

6. Publication of I.R. Digest covering brief abstracts of studies conducted on campus and other information related to higher education.

Recognizing these improvements in the management information system (MIS), the administration is convinced that the Office of Institutional Research is rendering invaluable service to the progress of the institution. The faculty is slowly beginning to recognize the importance of the office. Amid these realizations, the Office of Institutional Research is gaining a key position in the administrative structure of the institution.

REPORT CARD 3 - FUNCTIONAL MODELS OF INSTITUTIONAL RESEARCH
... FOR IMPROVING COMMUNICATIONS BETWEEN INSTITUTIONAL RESEARCHERS
AND DATA PROCESSORS

* * * * * * * * *

TOWARD IMPROVING COMMUNICATIONS WITH DATA PROCESSING USERS

Evans C. Harris, Jr.
Administrative Programmer
East Carolina University

There is a growing awareness among data processing (DP) professionals of problems in communicating with users. Expansion and technological advances in the DP function have caused internal situations that require considerable attention to manage. In many instances, little effort has been expended to provide for effective communications with users. The seriousness of the communications gap depends upon the attitude DP takes towards this weakness. Accepting communications problems as a necessary evil is a sign of trouble for a computer center.

The most serious sign of communications problems is a lack of confidence in the ability of data processing to adequately serve user needs. Lack of positive attitudes may be the result of users being promised a report and receiving it three days late. Other manifestations of communications problems are disillusionment and disappointment from concerned user management. The end result is a steady decline in user morale and slowing growth.

The inherent nature of data processing to deal with great volume and detail is conducive of a breakdown in communications. Slight misunderstandings are inevitable and may have serious consequences given the expense and critical nature of DP services. The growing dependence on computers in day-to-day decision-making and long-range planning requires that DP implement procedures to minimize the problem.

Another reason for communications problems is the technical nature of data processing. The DP organization places too much emphasis on this aspect. This is to be expected since universities and other DP training centers over indulge in technical instruction. The result of over emphasizing technical specifics is users who lack the proper interface needed to make efficient use of computer resources.

The third reason for communications problems is the two groups tend to view solving problems from different perspectives. Usually, the data processing people have come up through the ranks and have a limited conceptualization of how data processing fits in with the total organization. On the other hand, users tend to underestimate the time and expense required to produce a solid information system. Sometimes users fail to realize the prominent role they must play in any successful data processing application. Failure to properly perceive this role is a failure for DP to adequately communicate with the user.

Inadequate communications can be partly alleviated by taking several steps. First, encourage a business organization towards serving user needs. Second, emphasize education efforts and encourage user participation in the data processing function. Third, organize the computing center to facilitate communications.

Those people entering data processing concentrate on learning the intricacies and fail to assume a business orientation. Typically, computer center personnel have training in math or science and little knowledge or experience in business. The organization usually does not emphasize a business orientation. Consequently, the problem is compounded. We must realize that our job is not to passively react to the needs of our users. Instead, we must actively require that each data processing professional be concerned about the user and his needs. We must consider it a privilege to be of assistance to users.

Education efforts also demonstrate interest in users. Evaluation of user concerns reveals that lack of quality user education can be a deterrent to effectively utilizing computer services. However, efforts to strengthen the user's working knowledge of DP can be a strong motivator for seeking the assistance of the computing center. Education efforts should provide a better understanding of system capabilities and limitations. Proof of benefits such as increased job efficiency and better decisions that result from computer usage are just as important. Remember, each interaction provides the potential for modifying or strengthening user attitudes, behaviors and knowledge. Also, interaction provides a chance to learn more about the user and his needs.

Getting users involved is certain to help. Allow users to share the responsibility for creating successful applications. Keep in mind that people give their strongest support to a project they have invested time, personnel and expense. The more users are involved in the planning and implementation of a project, the more important they will perceive their role. And if users perceive their role as important, they are more likely to put forth the extra effort in future projects.

Another important facet of user interface is to provide a clear and responsive channel of communications. A productive channel of communications is important for initiating new requests. Also, communications channels are necessary for solving problems with existing applications operating on a routine basis.

The channel for requesting new services is usually well established through management or those responsible for allocating DP resources. But communications on a day-to-day basis are likely to be directed to whoever the user thinks can help.

The best way to promote the use of established channels is for management to explain and clarify to users the proper method for requesting help on DP related problems. It is necessary for programmers and other DP professionals who receive requests for help to tactfully turn the caller to the proper channels. Failure to do so can result in several people tackling the same problem. Even worse, the user who receives help through improper channels is more likely to call on that source the next time a problem arises. This increasingly weakens the proper channels.

Just as important, the user must receive prompt attention when he uses the proper channels in order to strengthen his faith in it. Good results require that the organization be designed to research problems and coordinate their prompt resolution.

Organizational changes in DP can help strengthen the user-oriented perspective. But in the end, winning over users and establishing credibility is best accomplished by results. When users get what they need when they need it, then they will be happy. Only then will users be more amenable to our suggestions and our education efforts. Only then can we really expect cooperation and involvement from our users.

COMMUNICATION BETWEEN INSTITUTIONAL RESEARCH AND DATA PROCESSING: AN INSTITUTIONAL RESEARCHER'S POINT OF VIEW

* * * * * * * *

Mark L. Perkins
Assistant Director
Institutional Research
Old Dominion University

The North Carolina Association for Institutional Research (NCAIR) has given considerable attention to the communication links between the data processor and the institutional researcher. At the 1976 Summer Drive-In Conference, NCAIR brought the data analyst and the institutional researcher together to discuss their mutual problems and share possible solutions. From the insight I gained at the Drive-In Conference and from my personal experiences at Old Dominion University, I would like to briefly discuss the two current problem areas in establishing the communication links and to offer several simple guidelines for facilitating communication from the institutional researcher's point of view.

First let me suggest that the institutional researcher can be compared to a telephone information operator who receives information requests from a wide variety of persons. The telephone information operator always has access to a comprehensive, well-organized data base when responding to request. Unfortunately, today's institutional researcher usually does not have such a data base. To attain the efficiency of the telephone information operator, the institutional researcher must become master of all of the available information at his institution. To do this the institutional researcher must begin to establish communication links by working hand-in-hand with the data processor not only in analyzing data but also in developing a well-organized, comprehensive, and easily accessible data base.

One current problem area in establishing communication links between the institutional researcher and the data processor is the lack of a common knowledge base. Both the institutional researcher and data processor can derive valuable insight and benefit from an understanding of the particular needs and demands of the other's job. As a professional, the institutional researcher will soon find that his knowledge of data processing systems and their associated problems can help him in obtaining the most accurate and timely information possible for his assignments. The institutional researcher must strive to become as familiar as possible with the tools which are used to manipulate data bases into the kinds of information he can readily use.

Another current problem area in establishing communication links is the lack of clear definitions for the roles which the institutional researcher and the data processor play in the institution's organizational structure. The organizational relationship of the institutional researcher to the computer center and data processor affects both his role as a user and as a developer of the data bases. In many institutions the institutional researcher does not even have access to all the data files necessary for carrying out his assignments. Viewed as a kind of stepchild of the administration, the institutional researcher often finds himself treated as simply another user without adequate consideration for his role within the institution.

Although the institutional researcher is given the responsibility for the generation of statistical data used in many planning and management functions, seldom is he ever given the authority to develop clean and accurate data bases. At many institutions the institutional researcher is now at the mercy of the data processor with no authority or organizationally defined role for becoming actively involved in the development of comprehensive and easily accessible data bases. The institutional researcher must strive to have his role within the institution defined in such a way that he has the authority to develop, manage and control the data bases which are so important in the production of good planning and management information. A clearer definition of the organizational role of the institutional researcher can greatly reduce the ambiguous relationship between the institutional research office and the computer center and thereby aid in establishing, effective communication links.

The following are several simple guidelines which can facilitate the establishment of good communication between the data processor and the institutional researcher. The institutional researcher can help the data processor by agreeing: (1) to clearly identify all of his analysis objectives; (2) to ask for analytical advice, particularly with regard to file structure, programs, etc.; (3) to give sufficient leadtime for analyses in order to provide time for programming and to avoid overloading computer staff with many high priority jobs; (4) to prioritize his requests so that the data processor clearly understands the level of importance and the immediacy related to each job; and, (5) to seek some knowledge of system operations so he may better understand the problems confronted by the data processor.

Similarly, the data processor can help the institutional researcher by agreeing: (1) to develop appropriate edit routine for identifying bad data elements when conducting analysis; (2) to provide an estimate of how long the analysis will take; (3) to keep the institutional researcher informed of the status of his requests (especially the very important priority requests); (4) to verify the accuracy of the reports he generates; and, (5) to try to develop some understanding of the needs of the institutional researcher and the constraints under which he works.

In summary, better communication links between the data processor and institutional researcher can be developed through their efforts to gain more understanding of their colleague's respective job and their efforts to obtain clearer definitions of their roles within the institution's organizational structure. Basic to their efforts to build effective communication links between the computer center and institutional research office is the desire on the part of both offices to effect a cooperative and congenial working environment.

REPORT CARD 4 - FUNCTIONAL MODELS OF INSTITUTIONAL RESEARCH
... FOR DERIVING QUALITATIVE DECISIONS FROM QUANTITATIVE DATA

* * * * * * * * *

INSTITUTIONAL RESEARCH IN 1984 AS VIEWED BY ETS

Nancy L. Beck
Associate Director
Institutional Research Program for Higher Education
Educational Testing Service

The title the Program Committee has selected assumes that I am going to be able to do a bit of predicting and future looking. Before I do anything that even resembles that, however, I want to emphasize that any predictions I might make are not to be taken as covering higher education in general or ETS in general. I am going to talk about some of the things we are doing which we hope are related to what is going on in higher education--but they should not be taken as definitive. ETS is a complex organization and I am sure to leave out a number of important things--probably the very one you have heard of and want to know about. So, you have to know before I even start, that I am disclaiming responsibility for any sins of omission.

Additionally, I would like to encourage you to think with me about some of the suggestions I have for what institutional research might be, and tell me areas which you think we might explore that I don't mention; or comment on those that I do.

A very general outline of what I would like to do this morning is that I want to talk briefly about where we have been and now are in institutional research at ETS; mention some of the broader areas of ETS concerns in higher education; discuss the work we are doing that is directly related to higher education and institutional research, and how they may be extended into the future; and finally talk a bit about the direction we think higher education, as it relates to ETS and institutional research, is taking.

One way to think about the future is to look at where we have been and where we come from. Institutional research at ETS really began with the early environmental work of Pace. In that work, one of the things he wanted to do was to provide information about institutions that would assist students in making good choices of the colleges they would attend. To provide <u>from</u> a college some of the same kinds of information that the student had to provide <u>to</u> a college.

We haven't come very far in giving students real information--it is still mostly in the category of hopes and dreams of what college will be like. It is still more selling than it is assisting a student to make an informed choice.

There are, of course, a lot of reasons for this, but institutional research should not lose sight of that early aim of environmental measures--to provide information that will assist in making informed decisions.

A later aim of institutional research has been to provide institutions with information that can be used in the planning and decision making process--which is really just an extension, to the institutional level, of that original aim.

Another early focus of institutional research was the student--attitudes, background, interests, and satisfactions with his or her educational experiences. Student research flourished in the 60's when students were the primary objects of national fascination.

The purpose of that kind of research was to enable a college to try to know just what and who, collectively, were these students--and perhaps to figure out, with Professor Higgins, "Why can't they be ... more like us?" It was information to assist the college in understanding its students. Both the early environmental measures such as CUES, and the early student research instruments such as CSQ were essentially descriptive.

In the late 60's our focus shifted, and it did so in two ways. At ETS we began to think of the institution as a whole, as a unit to be evaluated. The student was part of the institution to be sure, but we were faculty members, administrators, trustees, even, in some cases, the local citizens. The other shift of focus was from essentially descriptive instruments, to those that assumed action would be taken as a result of their administration. Or at least that the information provided could be used to take action or make decisions.

For us, the first instrument that grew out of this new emphasis was the Institutional Functioning Inventory. It asked how the institution was working, what is it like here and what can we do about it?

This fairly diagnostic tool grew out of Earl McGrath's long concern with the liberal arts college, and his attempt to understand why some institutions seem to thrive regardless of external conditions, while others seem to stumble along responding only to shifting outside pressures? Earl McGrath has retired about four times since his work with us on IFI and is currently at the University of Arizona where he continues to think and act on his educational concerns. I think we should adopt the Japanese way and declare Earl McGrath a National Treasure. A number of you here in this room I know, took part in these early IFI studies and may have had the opportunity to work with Dr. McGrath.

It seemed a logical step then from asking "how are we doing as an institution" to asking "where are we going as an institution". We were helped in making this logical next step by Norm Uhl's work here in the Carolinas--and the Institutional Goals Inventory was the result.

Tucked in here chronologically was another instrument that did not fit either the earlier student research focus, or the later institutional one. This was the Student Instructional Report--designed to allow students to evaluate their courses and instruction. This brand new idea--which is documented at least as far back as the 15th century--came into being as a force in the early 70's. It continues to be an important area of research and program development at ETS, and I want to touch on it again later.

Back to thinking about institutional self-study and evaluation. We now have instruments to gather data from a variety of sources about how the institution works; and information about how a variety of people think it should work.

Now that we can help a college gather all this information, how can they best use it? Presumably, knowing more about itself should lead to more informed decision making, and to better planning. In fact, one of the best uses of the kind of data institutional researchers gather with the instruments now available, can be as part of the planning process.

For example, a discussion of goals can be part of the planning process. An understanding of what people both on and off the campus think the college's goals are and ought to be can be a useful basis for thinking about priorities. I think it is safe to say that college administrators are becoming, and will continue to become, more sophisticated in management theory and practice. They really have to; managing a college or university is a complicated and challenging task.

All of this seems to point more and more to a planning and management focus for institutional research, and a good deal of our recent thinking has been toward that use of our instruments and services.

In a more concrete way than just thinking about it, we have begun an effort to assist colleges in this. We are in the early stages of a modest pilot program so we can learn, along with the colleges, what is needed--and how to provide assistance and information of this critical area. This 30-month pilot project with six colleges is called HELIX, and it is, basically, an attempt to link college goals and outcomes with planning, management, and budgeting decisions.

Now, I want to make a transition here from this outline of where we have been and where we are in the Institutional Research Program, to talking about some more general things that are going on at ETS that relate to our mutual interests in higher education.

If we assume that for an organization such as ETS, research and development are vitally important in order to understand and respond to the needs of education, then we need to ask what resources and capabilities ETS has to deal with those future needs.

For starters, we can make tests! In that area of ETS there are some 25 or so test development professional staff members across various academic disciplines, and there is a statistical analysis staff of about 15 professionals working in all areas of test construction. (You would think with all that they could figure out why the SAT scores are declining, wouldn't you?)

Test development at ETS is not confined to the SAT and achievement tests, however. Some of the newer ways that tests and testing are being thought of and worked on currently at ETS include, for example, the efforts of the staff of the Graduate Record Examinations toward developing a test of logical and critical reasoning--abilities not usually tapped by traditional tests, but acknowledged to be of critical importance in performance in graduate school and professional life.

The challenge is to develop a test that really does distinguish these qualities, then measure them in students taking the GRE, and then know you are

testing something other than the usual Verbal and Quantitative abilities. It is a difficult task when it has to be? Not too long, reliable and valid, acceptable to students and faculty, statistically significant, and machine scorable. They are working on it, but I do not believe the verdict is yet in.

We have at ETS, a research division with some 60 researchers. They study a host of problems from the most theoretical to the most practical. We have researchers who are so specialized and theoretical that they can only talk to about three other people in the world, and we have researchers who develop programs to help cities save money by figuring out the most efficient school bus routes. It takes all kinds.

A few examples. In a research group called Psychological Studies, there is some very interesting work being done in a study of creativity, and the possibility of being able to assess this vital quality. Their approach has been to define creativity as the ability to solve problems in a particularly effective, as well as unusual or imaginative way. This is different from artistic creativity and, I think, is potentially a much more useful definition. They are looking at creativity as a characteristic that is not found in isolation, but as one aspect of performance in dealing with complex, challenging tasks. Their work is being sponsored by the GRE Board and has, so far, shown some promising results. They have been able to develop some measures--called Tests of Scientific Thinking--that do seem to be testing a dimension different from the usual Verbal or Quantitative ones. This work too, is still in its early stages, but we are all watching it with considerable interest.

Also in the Division of Psychological Studies, the work of Herman Witkin is cognitive styles may help us understand a little better why some students learn in one kind of class situation while others do not.

Cognitive Styles runs the risk of becoming this year's educational catch word, and any model, typology, or theory touted as the answer to learning problems is bound to fall short of the mark. On the other hand, anything that can help us understand the learning process, (as I think some of the Cognitive Styles research does), and that may have some practical application toward helping students learn, should be studied and encouraged.

Criterion Referenced Testing - another idea much in vogue--is being worked on at ETS by a group in test development. They are learning what is going on, and trying out ideas in cooperation with teachers and institutions across the country.

Meanwhile, in another corner of ETS (actually, it is in a basement), professional and occupational assessment is flourishing. This whole area seems to have been newly discovered, although I suspect it is probably about as new as student evaluation of instruction--say, about the Middle Ages.

In a rapidly growing area called COPA (the Center for Occupational and Professional Assessment), research and development are going on in methods of helping people to demonstrate their skills and abilities in ways that are far from the traditional tests. This is testing and evaluation directly related to

doing a job. It is challenging ETS researchers to rethink their ideas of how to test and what to test--and they find the challenge exciting and rewarding. Lab technicians, merchant seamen, carpenters, police officers, fire fighters, auto mechanics, dentists--even the PGA--have all come to ETS for help in learning how to evaluate the members of their trades, crafts, and professions. ETS researchers have been riding around in the back of police cars, talking with mechanics and service departments, learning the terminology of a deck officer, and of modern dentistry--and generally broadening our understanding of how to assess acquired skills and competencies in ways that will be most helpful to professions and to the consumer.

The staff in COPA, which numbers about 50, includes specialists in personnel assessment, training, task analysis, and research. Their experience has been in industry, government, the armed forces, and secondary and higher education. Their professional training is in a variety of fields. It would be impossible, obviously, to have on the staff experts in the subject matter of all the fields COPA is asked to work in-but they have devised very successful ways of combining their knowledge of the intricacies of assessment with the specialists's knowledge of their own occupation or profession.

This kind of work is still viewed with a certain uneasiness by the more traditional educators. Despite that, however, this is one of the fastest growing areas of research at ETS.

Then there is a relatively new group known as the Education Policy Research Institute, with offices in Washington, D.C., which studies needed reform in education policies at all levels of government, and across issues that range from financing public schools to the proper roles in educational governance of federal, state, and local authorities.

The Institute for Urban and Minority Education, which ETS co-sponsors with Teachers College of Columbia University, conducts research into issues and problems that pertain to urban and minority education. (I'm not sure how you get to be an Institute at ETS.)

Now that is something of a laundry list of projects but I wanted to give you some flavor of the diversity of interests and the work going on. I think that this range of resources and people will help us respond positively to the educational problems and issues of the future.

There is a radio ad up where I live that says "It ain't just paint"--and the point I want to make here is that at ETS, is "Ain't just tests".

Let me turn now from ETS in general to ETS as it relates particularly to institutional research and tell you briefly what we are currently doing. As I do this I will expand on what a particular researcher is doing now, and include ways in which we feel that these current activities may relate to the future.

These are the ETS people whose names you, as institutional researchers, are most likely to know. It is from this group that instruments and reports useful to IR people come, and these are the researchers who are most likely to be doing the work that will be directly helpful to you as we look to the future.

Len Baird is particularly interested in what students do when they graduate from college. He did an important study a few years ago called "The Graduates: A Longitudinal Study of Their Plans, Experiences, and Attitudes as Seniors and as Postgraduate Students." He is finding out how students view their undergraduate experiences and how, when, and why, they made their choices and decisions about future plans.

Systematic collection of data such as these by colleges would have a number of possible uses--for the undergraduate institution in curriculum planning, advising, and in recruiting and retention work; for the graduate and professional schools; for man-power projections and planning agencies; and for researchers generally who are interested in college effects. Much as we know about students when they enter college, we know precious little about them when they leave--about their attitudes, their plans, their expectations, or even about what they thought of their college experiences. Presumably this information could help colleges serve their students better. It is an area we are very interested in exploring, and Len's work is a step in that direction. We have even gone so far as to give this a name-it is called The Senior Survey.

John Centra continues his work in evaluating teaching and learning. He is currently directing a project that is looking at faculty development programs across the United States. As any of you who have been involved in student evaluation of teaching probably know, John has done a tremendous amount of research and writing in this area, and has looked at a number of the very interesting problems and questions there. I am going to talk a bit about faculty development and student evaluation later, so I won't elaborate here.

Mary Jo Clark is just finishing a major project on dimensions of quality in graduate education. For a variety of reasons this project got behind schedule and for several months now has been on the verge of being finished--we had come to refer to it as the "ever ending project".

Rod Hartnett has been interested in what he has called departmental effects, that is, in the effects different departments in a college have on the academic achievement of their students. His research shows that it may be very misleading to speak of "good" or "poor" colleges. Much more important are the departments, and they can be remarkably different within the same college. Something we all really think we know, but he has some rather dramatic data to illustrate this point.

And, speaking of departments, this is another area in which we think there may be some real need for self study and evaluation--perhaps a kind of Departmental Functioning Inventory to aid departments in assessing their own strengths and weaknesses as learning environments. I was pleased to hear Jim Firnberg confirm this in his remarks last night. Certainly at the large universities the department is the level at which change can occur more easily than at the complex level of the whole multi-purpose university. Some of the work Mary Jo has done in the dimensions of quality project could be very useful to departments, and development work is beginning in this area.

Al Carlson has been doing a study, sponsored by the Law School Council, of the competencies needed to be a good lawyer. Now there is a novel idea! After

centuries of having lawyers, we are now looking at what one should know or be able to do in order to be a competent lawyer.

This is a project with several stages--of which only two or three have been completed. The results may well have some important suggestions for the curricula and programs of the law schools.

Staying with the professions for a moment, Mary Jo Clark has also done some preliminary work for the Business School Program in a project to determine the criteria for success in business, and then relating these back to the business school curriculum. As I said, there has only been preliminary work so far, but I believe it will be carried out as a full project.

Jonathan Warren, in the ETS Western Office in Berkeley, who developed the self-study instrument for community colleges called Student Reactions to College; has since turned his attention to the baccalaureate degree, and has directed a project that tried to find out what a Bachelor's Degree means. That is not as easy as it sounds, and it takes an added importance as non-traditional degree granting programs become more common. A Bachelor's Degree is no longer the reward you get only after spending four years in college.

As we found out recently when ETS took part in a Soviet/US higher education exchange, the meaning of a degree is of tremendous importance in international education-and in international relations. If we don't really know what constitutes a degree--and Bud Warren found that the content can differ as much between some colleges as it does between some countries-it is hard to make decisions that rest on assumptions about that degree.

I spoke with Bud just yesterday only to have him tell me that, as a result of his work in the Bachelor's Degree study, he has expanded his interests and is now directing a project aimed at developing collective measures of the broad competencies generally associated with general education. I asked him for a one sentence description of what he was doing, and that's what he said. And on that one, you now know as much as I.

Dick Peterson, whom a good many of you may know from his early work with student research and his later work with the IFI and with goals, is especially interested in policy making at the state level as it affects services for adult learners. He did a hugh study in California entitled "Postsecondary Alternatives to Meet the Needs of Californian Adults" and his research continues to explore the ways in which the educational needs of adults can best be understood and then how that understanding can be turned into programs and services. With the number of adults increasing, this certainly will be an area of growing importance to education.

Part of this California study was a very fine "needs analysis" survey about adult learners and if that is something you are interested in I would recommend looking at Dick's report.

In an area that is relatively new to ETS higher education research, Marty Katz is continuing his work in guidance systems, and in his special concerns in

helping students learn how to make wise and informed decisions about possible career choices. SIGI--System for Interactive Guidance and Instruction--is the obvious result of his work--using complex computer technology to allow a student to work through his or her interests, and to learn about career paths and possibilities based on that individual student's background, abilities, interests, and needs.

But, beyond the computer, the SIGI group at ETS is concerned with all aspects of guidance and choice as students move through their education. They would like to make some of the work that has gone into producing SIGI available through other programs. They have talked with us about some applications of their work to course evaluation, and with other people at ETS about prediction models. These "spin offs" of SIGI are still in the exploratory stages but I do think they show promise for wider application.

And then, finishing this list of who is doing what with one of ETS' finest--Pat Cross continues her interest in the "new student" to higher education, and in encouraging teachers and institutions to accept the challenge of learning to work with students who do not fall into the traditional and familiar patterns.

Pat's real concern is to ensure that while we are educating the money, we don't lost sight of educating the individual. If we do, the individuals who will be lost are those least able to get it on their own. There are educators who see any accommodation to the needs of the new student as an "abandonment of standards"--Pat would encourage us instead to respond to this as an exciting challenge to the creativity of education that can enrich us all.

Now, to 1984--in case you think I've forgotten the title of this session. I re-read Orwell's novel this past weekend when I was thinking about this talk. I thought there might be some theme I could use to tie things together. As soon as I rejected any ETS/Big Brother analogy, I didn't find any. Any literary allusion I might make from the novel to institutional research would be forced; I didn't even find an appropriate quotation. In fact, all that happened was that I got depressed. Have you read that book? Our debt to George Orwell is for giving us a date--sufficiently far in the future (still)--to which we can allude with some common understanding. But I want Don Reichard to know that I did try to find some way to tie 1984 to institutional research. I'm afraid I didn't succeed.

When we look ahead and think about institutional research in the future, we need to start by asking ourselves what institutions will need for the future, and why. The answer to the former will be varied, but the answer to the latter should be: to improve the quality of education. When we get bogged down in our day to day work, feeling "In the thick of thin things" as a friend of mine once said, we may need to remind ourselves of what our answer should be.

As we think about the future and the needs of institutions, we are increasingly concerned with use. Institutional research in the past has often been used to describe, and many of our early instruments had that as a basic purpose. It really is not enough anymore just to describe. We must assume that results or data are to be acted upon and used.

We look at our own Institutional Research Program at ETS and ask what institutions will need in the future, and how can what we provide be used toward filling those needs?

In our own work we think that the future will be an extension or an expansion, of current work. Many of our higher education projects, as I have already noted, have aspects that can speak to what we see as emerging institutional needs. And, in our current instruments, we are thinking of expansions and extensions that will enhance their usefulness in the broader future of institutional research.

Let me give a few examples from our current instruments and their research support.

Faculty development has appeared as a natural and appropriate outgrowth of both the upsurge in student evaluation of teaching, and of the constrained financial times--teachers can't just move on.

Having evaluated a teacher, what do you do about those who fall short? You don't just--indeed, you can't just--fire them. Faculty development programs do--or should--reflect the institution's responsibility to help teachers do their jobs better.

We have a course evaluation instrument--the Student Instructional Report--how can it be extended to provide assistance--not just evidence?

Our current work is all aimed at giving instructors and institutions the kinds of information that will help them work toward improving those areas in which an instructor is deemed to need help.

Defining course objectives, measuring progress toward them, appropriate normative data, assistance tailored to the individual teacher's results--these are all designed to help act on evaluation results--with, we hope, an improvement in teaching.

With the Institutional Goals Inventory, our concern is with providing more background and assistance to enhance the ways in which these instruments, and the information they provide, can be used most effectively.

If an institution invests the time and money is using, say, the IGI--and if the process of a goals study has been carried through carefully and fully on a campus--then the results should be viewed as a resource to be used throughout the college and in a variety of ways.

This is true of any gathering of broad data from representatives of many institutional constituencies. Too often the data gathering aspect is seen too narrowly--get the information to look at a problem, and once that has been done, forget it and move on.

This is where we think the importance of institutional research in the planning process can be very useful. The kinds of information available to IR

people can be applied to questions and concerns across the campus, and it can be done continuously--because the office of institutional research is a constant--it isn't there to solve a problem but to provide continuing assistance.

As planning becomes more of an on-going process (and that certainly is the direction it is taking), and less of an ad hoc operation, I see institutional researchers as becoming more and more involved in it. In fact, I can't help but feel, as we work with colleges around the country, that this is the direction the profession is taking. IR people know how to gather and summarize data, they are familiar with the instruments available for institutional self-study, and they have the background and training to use them effectively. Additionally, they have the broad view of the institution that is so valuable in planning. If planning is to become the effective on-going process it can and must be, institutional researchers should be playing a pivotal role.

Since we do see planning as holding center stage in institutional self-study and evaluation in the future, we are thinking of ways in which the instruments we now have can be used in this way rather than only in response to specific problems or questions.

This wider ranging use of institutional research instruments brings me back to the pilot program I mentioned earlier ... HELIX. We had a workshop last week with the six colleges in the pilot, and we began working on the kinds of things I have been talking about. Institutions in the Helix project will be administering the new Undergraduate Assessment Program tests to all their seniors in the next month or so; they have already, or soon will be, administering IGI to their students, faculty, administrators, and trustees; and they are collecting a wealth of the more mundane, but very important, data such as FTEs, faculty work loads, distribution of classes, fee structure, and so forth, which is going into the computer.

The UAP test results will include, for some of the advanced or field tests, Assessment Indicators. These are group scores for the sub-fields that, taken together, constitute the major field of study. For example, in Biology the Assessment Indicators are in such sub areas as Ecology and Evolution, Behavior, Genetics, Molecular Biology, Plant Morphology, and so forth.

Used at the department level they can answer some questions essential to effective self-study and planning.

- What is the level of student learning?
- Is that level reasonable given the goals of the curriculum?
- Which parts of the curriculum show strengths and which need improvement?
- What actions need to be taken to maintain or improve the curriculum?

HELIX, then, wants to look further at these student outcome measures in relation to the goals of the institution--as they are seen on IGI--and then look at both of these in relation to the institutional data collected and to the budget.

What needs to be done in order to achieve the goals deemed especially important by the college? What needs to be done to have student outcomes at the highest level of quality possible within the college's resources of people and of money? What happens if changes are made in this variable, or in that one? Different combinations can be simulated within the planning model and alternatives looked at and judged.

I won't go into all the terminology that seems endemic to this kind of endeavor--linkage reports, goals based budget, and even more. What I want to emphasize is that we, and the colleges, see the most important part of HELIX to be the on-going process of planning that it establishes and maintains. It is aimed at providing useful information to a college on an on-going basis to enable it to make decisions that reflect its own goals and its own plans--rather than having decisions just happen as a reaction to outside pressures.

We are pretty excited about HELIX and its potential for helping colleges cope with increasingly difficult problems.

Looking ahead in higher education, should not be, for institutional researchers just looking for the problems. It should also be to give us an idea of where we want to be; to know what will help us get there; to try to anticipate what our needs will be for information to make the right decisions; and to look always for ways in which we can improve the quality of education.

As we look ahead from our office we have to admit too, that ETS will always be behind in solving problems or, more accurately, in developing instruments and services to help you solve the problems. Instruments and program development are slow processes and they are expensive. It is just not realistic (or very smart) for us to try to forecast what problems education may face and then try to have instruments ready for them when, (if?), they arise.

We try instead, through research and through working with colleges, to anticipate what the needs of institutions will be and then try to meet those. As I said, this guarantees that we will always be behind, but if we did it the other way I'm afraid we might have the equivalent of what my doctor once described as "A vitamin in search of a disease".

It is your job to know what you want your institution to be, and it is our job to try to provide some help as you work toward accomplishing your goals.

Instead of the unremitting grimness of Orwell's 1984, I would rather think that institutional research will move toward what David Matthews has termed "A New Purpose". Expanding on the theme of his remarks at AIR in Los Angeles last spring, he reminds us in a recent Change article "that for most of its history higher education in the United States was a movement, not a bureaucracy". He is speaking of education in general, but his words are especially pertinent to institutional researchers as we look to the future of education, and our role in it. On the one hand he quotes a university president who asks:

> Will the whole process of multicampus systems and 1202 commissions; federal regulations and state regulations; unions and system-wide personnel practices; teaching load requirements and cost per full-time equivalent student; affirmative action and grievance procedures; lawyers and courts; budget reviews and WICHE systems to standardize terminology; accounting practices and rank and serial numbers, simply drive us out of the education business and into the bureaucracy business?

I would hope instead that the kinds of things you want and can do as institutional researchers for your institution, and the kinds of things we are doing at ETS will enable us together to, as Secretary Matthews put it, "develop ways to understand reality". Because that is really what institutional research now, and in the future, should be all about.

Why don't we meet again in 1984--when, I remind us all, we will just have been through another national election--and see how well we have done toward understanding reality. I am optimistic.

Thank you.

ACADEMIC STAFFING MODEL 1.3

* * * * * * * * *

Robert E. Reiman
Coordinator of Long-Range Planning
Appalachian State University

Description and Uses

Academic Staffing Model 1.3 should be regarded strictly as a tool for program planning and development. It is not an optimizing model, i.e., it does not prescribe the best possible course of action that can be taken, but is purely deterministic; it helps to answer the question: "if a particular set of faculty assignment actions is taken, what will be the impact?" Therefore, the model can be used to investigate an infinite number of alternative actions, on paper, without the pain of experimenting with the real situation.

Although the model utilizes a considerable amount of "hard" (i.e., quantifiable) data, and may appear to be somewhat mechanistic, it relies heavily on high-quality judgmental inputs at a number of critical points. The abhorrent term, productivity, is used frequently in the model--but it refers only to averages and to the output of groups, not individuals.

The model can be used initially for allocation/reallocation of faculty among disciplines, departments, colleges, and/or programs, provided only that the number of full-time equivalent faculty assigned can be accounted for. The extent to which further types of allocations can be made is limited only by the imagination of the planner and his ability to interject the judgmental decisions that are mandatory if the model is to continue to drive.

The user should understand that this model, as does any other simulation model, possesses limitations. It s main use is to point out inequities in faculty assignments, as they appear from the data, and to answer "if-what" questions. It can also give insight into trends and tendencies that may occur if a given course of staffing action is pursued throughout the various levels and types of faculty activity.

The whole process relies heavily on the quality of the input data, both quantifiable and judgmental; the answers given by the model will directly reflect the accuracy and integrity of these data and judgments.

Activation of the Model

The model is activated in several sequential steps, to wit: (1) production of baseline data, (2) formulation of an "equalizing" iteration, (3) development of alternative assumptions and/or strategies, and, if desired, (4) production of a predictive iteration, or, preferably, a series thereof. Each of these sequential steps is discussed in detail in the sections following.

Determination of Baseline Data (Historical Iteration)

For use of the model as a tool to allocate/reallocate faculty among disciplines, departments, and/or programs, it is necessary to first construct an array of historical data that delineates the following:

1. The number of student credit-hours generated by each organizational unit, by level of instruction, and by combined totals.

2. The number of full-time equivalent instructional faculty that were required to produce the student credit-hours generated at each specific level, by each organizational unit, and by combined totals. (This action itself requires the first in the series of judgmental decisions. "Instructional faculty" must be defined. The amount of individual effort must be determined and then proportioned among the various programs and levels of activity.)

3. The derivation of "productivity ratios"--a term which describes the average number of student credit-hours generated by each full-time equivalent faculty member.

Baseline data may be accumulated and exercised for only one semester (or quarter), preferably Fall, or for a whole year. The advantage of using Fall Semester is that trends and tendencies can be discerned earlier and the output used as a basis for staffing decisions for the year immediately following. The advantage of accumulating data for two semesters (or three quarters) is that peaks and valleys of "productivity" are smoothed out and the output represents more of an "average" situation.

An historical iteration, for Namier College (a mythical institution!) Fall Semester 76-77, is shown in Figure 1. Actual productivity, as derived in 3, above, can be viewed as rather uneven among (1) the producing departments, and (2) across the various instructional levels. Some of this unevenness is necessary, and can be explained, or at least rationalized. It is the unexplainable unevenness that gives rise to the next set of judgmental decisions--whereby an attempt must be made to "equalize" resources among functions.

It should be mentioned that these baseline data can be derived, ideally, from the output of another model--Resource Requirements Prediction Model 1.6--which is already in use at some institutions.

The Equalizing Iteration

An example of an equalizing iteration for Namier College is shown in Figure 2. The data are from the same base as the Historical Iteraction--Fall Semester, 1976-77.

The purpose of this iteration is to try and determine, for each discipline and for each level of instruction, what number of fulltime equivalent instructional faculty (FTEIF) ought to be required to produce the number of student

credit-hours (SCH) that were actually generated during the period from which the historical data were derived. The judgmental task that must be undertaken at this point is that someone (or, preferably, some group) must determine what is the reasonable expectation of average FTEIF productivity for a particular organizational unit, based on such factors as teaching method(s), facilities, nature of the discipline, and the like.

In the example in Figure 2, a "jury", composed of faculty and administrators, made this determination of differential productivity levels (the columns headed "Simulated PR" in the example). It is these simulated differentials, applied uniformly to "like" disciplines, that form the bases for equalization. This is probably the most difficult of the judgmental tasks--differentials were arrived at only after long hours of deliberation by the jury. Another item that should be mentioned is that this jury prior to setting the differentials, studied in detail the functions, output, and aspirations of each individual discipline; therefore, its decisions were based on a significant amount of background information.

Credit-hours generated (CHG) during Fall Semester, 1975-76, for each discipline, are shown in the columns headed "Actual CHG". This element (CHG) is divided by the Simulated PR to determine the predicted number of FTEIF it "ought" to have taken to produce the number of credit-hours that were generated, if the Simulated PR had indeed been in effect. These numbers of projected faculty are shown for the various instructional levels in columns headed "Simulated FTEIF" and can then be compared to the actual number of FTEIF. The total difference in "ought to have been" faculty and actual faculty, for each organizational unit, are shown in the last column, headed "d".

Numbers for each discipline, department, college, and special unit are then accumulated across the entire matrix--the appropriate columns and rows are summed and must balance. If the total number of projected faculty versus actual faculty--in terms of full-time equivalents--nearly coincides, then the productivity ratios are considered to be well adjusted and the iteration can be used for further purposes. In the example (Figure 2), the total FTEIF projected was only .38 of a position more than the actual FTEIF and the iteration was accepted. It is suggested that if the difference exceeds a negative or positive .50, the productivity ratios should be readjusted to bring the total difference within this tolerance before proceeding further with the exercise.

The Predictive Iteration

No illustration of the Predictive Iteration is shown here. However, its use is based on the premise that, for a fixed given amount of faculty resources, faculty productivity might be adjusted upward in varying amounts, thereby creating a "pool" of positions for functions other than instructional--for example, research, community services, faculty development, etc.

For example, differential productivity per FTEIF might be maintained as in the Equalizing Iteration (Figure 2) except that PRs might be raised by a flat percentage.

After the adjustment of PRs, the matrix can be recalculated--this time within a smaller predicted FTEIF that would have normally delivered the Fall Semester credit hours, leaving an "excess" of FTEIF that could be reallocated to other purposes.

Not only can the Predictive Iteration of the model be used in the manner just described, but it could serve as an allocation instrument for the determination of other factors. For example, to examine the impact of reducing or eliminating less desirable, low demand, or high cost programs--or for identifying those areas that could release faculty needed to implement new, high demand, and/or more desirable programs. The heart of the scheme lies in the ability of the planner to predict credit-hours generated and to manipulate the productivity ratio, thereby portraying the resultant FTEIF values.

Figure 1

NAMIER COLLEGE

ACADEMIC STAFFING MODEL 1.3 HISTORICAL ITERATION

	LOWER DIVISION			UPPER DIVISION			COMBINED		
	CHG	FTEIF	PR	CHG	FTEIF	PR	CHG	FTEIF	PR
Biology	1891	7.50	252	943	7.00	135	2834	14.50	195
Chemistry	919	4.50	204	189	4.00	47	1108	8.50	130
History	2046	6.50	315	472	4.75	99	2518	11.50	224
Math	2829	8.50	333	755	4.75	159	3584	13.25	270
English	2835	9.50	298	471	4.75	99	3306	14.25	232
Phys.Ed.	969	4.75	204	283	1.75	162	1252	6.50	193
Business	396	1.00	396	2830	8.50	333	3226	9.50	340
Music	390	2.50	156	189	1.50	126	579	4.00	145
Education	0	0	-	1886	9.25	204	1886	9.25	204
Poli.Sci.	893	2.50	357	660	4.50	147	1553	7.00	222
Sociology	995	3.00	332	754	3.00	251	1749	6.00	292
Total	14163	50.25	282	9432	53.75	175	23595	104.00	227

Figure 2

NAMIER COLLEGE

ACADEMIC STAFFING MODEL 1.3 EQUALIZATION ITERATION

	LOWER DIVISION					UPPER DIVISION					COMBINED			
	ACTUAL CHG	ACTUAL PR	ADJUSTED PR	SIMULATED FTEIF	ACTUAL FTEIF	ACTUAL CHG	ACTUAL PR	ADJUSTED PR	SIMULATED FTEIF	ACTUAL FTEIF	ACTUAL CHG	SIMULATED FTEIF	ACTUAL FTEIF	d
Biology	1891	252	400	4.72	7.50	943	135	100	9.43	7.00	2834	14.15	14.50	- .35
Chemistry	919	204	200	4.59	4.50	189	47	100	1.89	4.00	1104	6.48	8.50	-2.02
History	2046	315	315	6.49	6.50	472	99	125	3.77	4.75	2518	10.26	11.25	- .99
Math	2829	333	300	9.43	8.50	755	159	175	4.31	4.75	3584	13.74	13.25	+ .49
English	2835	298	300	9.45	9.50	471	99	125	3.76	9.75	3306	13.21	14.25	-1.04
Phys.Ed.	969	204	250	3.87	4.75	283	162	175	1.61	1.75	1252	5.48	6.50	-1.02
Business	396	396	315	1.25	1.00	2830	333	315	8.98	8.50	3226	10.23	9.50	+ .73
Music	390	156	150	2.60	2.50	189	126	125	1.51	1.50	579	4.11	4.00	+ .11
Education	0	-	-	0	0	1886	204	200	9.43	9.25	1886	9.43	9.25	+ .18
Pol.Sci.	893	357	215	2.83	2.50	660	147	125	5.28	4.50	1553	8.11	7.00	+1.11
Sociology	995	332	315	3.15	3.00	754	251	125	6.03	3.00	1749	9.18	6.00	+3.18
Total	14163	282	292	48.38	50.25	9432	175	165	56.00	53.75	23595	104.38	104.00	+ .38

INSTITUTIONAL RESEARCH IN A NEW KEY
* * * * * * * * *

Ben H. Romine
Director of Planning and University Studies
University of North Carolina at Charlotte

When I first began to make notes for this presentation, I was in the pediatrics ward of a hospital. A few feet away, my eight-year-old son lay in traction with a broken arm, a broken leg, a shattered knee, and several missing teeth. He had been hit by a car and was facing a summer of lying flat on his back, either in the "trap" they had him in or in a body cast. His situation changed things. Our routines, plans, and priorities had to be reviewed, and new issues and questions had to be faced. At the risk of overstating the obvious, his circumstances made all of us take another look at everything we were about.

Now I hope this introduction does not strike you as maudlin or as a departure from good taste. I mention it not for its affect as a personal statement but because it highlights an important principle--one that may be especially important for us as institutional researchers. The principle is this: dramatically altered conditions force dramatically altered thinking.

I am convinced that the conditions which surround our profession have been dramatically altered since we began, and I believe that we have a crucial task before us of reviewing our concerns and priorities and considering how we might best respond.

To give you some idea of what I mean about the altered conditions, let me remind you that IR was largely defined during a period of rapidly expanding enrollments, increasing budgets for most everything, and a seller's job market. It was established within and for the benefit of organizations enjoying a heyday of popularity, whose major management concern was to accommodate the demands for more and bigger. Institutional research was an important tool designed to improve the capacity of decision makers to administer the burgeoning institutions in their charge. It shed light on the important issues facing higher education in those times.

We provided descriptive studies, and we completed statistical reports. If we had really advanced "shops" (a term that gives me the shivers), we conducted analytical and yet evaluation studies. Some of us even became interested in examining educational variables beyond the borders of our own institutions and thereby became "educational researchers" instead of "institutional researchers," which, of course, required two associations.

This is neither a put-down of the role we have played nor a total rejection of the character our field has taken on. Institutional research quite appropriately has become a statistically-based, analytical function, concentrating naturally on the quantitative aspects of the institution. It established

---

*Presentation made at the Southern Conference on Institutional Research, Atlanta, Georgia, October 28, 1976.

its priorities, asked the questions that needed to be asked, and developed the methodology to address them. It learned to measure those things that needed to be measured and responded to the conditions which surrounded and shaped it during its formative years.

But all of a sudden--overnight as institutions reckon time--our colleges and universities are confronted with a new set of conditions, and WHAM! our lives are changed--or they should be if we are awake to what is going on.

You are familiar with the headlines: college age population declines; 461 faculties unionized; higher education becoming vast bureaucracy; composition of student bodies shifting appreciably; institutional autonomy threatened; college graduates fail to find jobs; market glutted with Ph.D's in certain fields; Podunk U. closes doors; CUNY suspends all classes; private industry offers courses for college credit; tenure system under sharp attack; institutional budgets suffer due to inflation; state legislature fails to authorize salary increases. The list seems endless. Some positive changes. Many troublesome issues. Yet the rate and nature of change in our institutions is merely reflective of the enormous changes taking place in the larger society. The entire world is undergoing the most compacted period of change in history.

During the last ten or fifteen years, science has led us to discoveries which profoundly affect our understanding of intellect, memory, and learning. Every day we are reminded that current patterns of urbanization, worldwide, can destroy healthy social processes and spawn hostility, despair and alienation.

We see many of the assumptions which undergird industrial society falling away, e.g., that nature's abundance is virtually limitless, that its balance is solid, that energy is cheap. We have come to recognize that some of the freedoms we have presumed to be rights are in fact privileges which may not be indefinitely affordable, e.g., the right to travel anywhere, anytime; to drink clean water, breathe clean air; to determine the size of our own families.

Beliefs and institutions which supported society for generations are threatening to give way. Many of our political, economic, religious, social, and educational systems have been shown to have serious defects; and we have become aware that new policies, approaches, and attitudes are desperately needed to accommodate a changing reality.

One does not have to be a prophet of doom or a seer to recognize that the entire world is undergoing an enormous transformation, nor does one have to be a pessimist to suppose that the past order is unlikely to be replicated ever again. Those who assume that it's business-as-usual are either madmen or dangerously underestimating the character and implications of what is going on in our world.

There's nothing new about change. It's continuous, of course. But there seems to be a different, more compelling element this time. There is the disquieting sense, shared by many reasonable people, that society may be poised on the threshold of a new era, that we are entering a period which is to be quite different from what we have known in the past. Herman Hesse, in Steppenwolf, spoke of such times when he said:

> Human life is reduced to real suffering, to hell, only when two ages, two cultures and religions overlap. A man of the Classical Age who had to live in medieval times would suffocate miserably just as a savage does in the midst of our civilization. Now there are times when a whole generation is caught in this way between two ages, two modes of life, with the consequence that it loses all power to understand itself and has no standard, no security, no simple acquiescence.

It is in this climate that George Bonham opened his editorial, which appeared in the June, 1974, issue of Change magazine?

> In higher education, the ranks of those who now care for the issue of social thrust and cultural substance have dangerously dwindled. And so have the number of those who are willing to take thoughtful risks to try alternatives to our accepted processes and approaches, some of which clearly work for us less and less often. I doubt that the larger ramifications of this decline in thought are generally recognized.

What of our processes and approaches as institutional researchers? How do we express our concern for the "issue of social thrust and cultural substance?" If our major function is to shed light on our institutions, to help identify the trends, the forces, the opportunities, strengths, weaknesses, and threats--if we understand our role to include these responsibilities, then I think our profession is in for a review. If the essential question put to us is "what's happening?", I would argue that we must learn to interpret that question in new ways. We must broaden our perspective, increase the sensitivity of our tools, and expand the range of issues with which we are concerned.

What are some of those issues? They will, of course, vary from institution to institution; and, if we take this seriously, our first task will be to identify them locally. But there are some that I would guess are common enough to ring bells with the majority of us.

First, there is the matter of mission and goals, basically philosophical in nature. What are our institutions trying to do? Are we seeking ends which were appropriate 20, 50, 100 years ago but which no longer deserve pursuit? What are our value commitments? How do we stand in relation to a society which is, at best, difficult to anticipate? Does the deterioration of the family or the church raise questions for us? Does the erosion of confidence in our political system offer us any signals? Does the enormous spread in society's perception of citizens' rights and citizens' responsibilities speak to our obligation? Is it enough to say that colleges and universities have survived during simpler, less heaving times, and that they will continue to survive in vital health? The railroad barons adopted this attitude in the early part of the century. But they made a fundamental and disastrous mistake: they assumed that their product was railroads and thereby missed the more important print--what the nation cried for was transportation.

We who claim to shed light on the institution must help find ways to raise and address these issues. We must attach some of our concern to direction, to

mission and goals. The number on the gauges should not command our complete attention. We must be mindful, too, of the payload and destination.

Then there are the questions of policy and procedure. Lofty phrases and grand sentiments are useless if our translation of them is weak. Is there a good "fit" between what we say we are about and the way we pursue our intentions? Here is where we come right down to earth and are forced to engage in the most difficult and most important analyses. Is our staffing plan (assuming there is one) consistent with our avowed goals? Is the budget making process related to what we espouse or to descriptive (and sometimes deceptive) statistics and squeaky wheels? Is the faculty reward system keyed to what we are about or want to be about, or is it modeled after some institution of another time and/or place? Do we talk continuing education or research or undergraduate instruction and penalize efforts to make it a reality? What are the implications of our institutions' policies governing faculty load? At UNCC we have found that while people in the senior ranks get an automatic three-hour reduction in teaching load, most of the organized research is conducted by those in the junior ranks. What of the academic advising policies and procedures on our campuses? Again, at UNCC we found that the advice being given to transfers in one of our largest colleges was actually contributing to the attrition rate in that college.

These types of policy and procedural questions seem to me to be very much in the domain of a group which claims to study the institution and assist decision makers in their responsibilities. Some of the questions lend themselves to statistical treatment, but others do not, and we should not shy away from those areas of policy and procedure where judgment is required. Most of us, whether we realize it or not, are in an excellent position to gain the overview, the broad perspective, if we will dare stop shoveling smoke long enough to clear our vision. I believe that our charge and obligation in these times of rapid change both within and without academe is to raise questions and define issues as well as to ply a trade. Our professionalism demands it. But if we are to move in this direction, I believe that some of us will have to modify our thinking a bit and sharpen our understanding of our function.

On the lowest rung, I would like to see us ban the phrase, "institutional research." It seems to me that this label has come to suggest in some minds an almost total reliance on the statistical, empirical model. Our produce is not data--it is analysis and an increased capacity to understand. Statistical analysis should not be the only brand on our shelf; it is just the brand that too many people have come to expect of us. Philosophical analysis and policy research are at least as important in my opinion. So I feel more comfortable with the descriptor "college or university studies" or "institutional studies" or "planning studies." But that, of course, is eyewash if we just leave it at that.

More important, I would suggest that we get out of our offices or the computer center or the dean's office and talk with faculty members, students, staff, community leaders, and plain citizens. Let's study what's on people's minds--get their view of what's happening in and to the institution--what should happen or could happen. The Institutional Goals Inventory is important not because it lends itself to clean analysis or provides neat answers, but because it begins to lead us to the right questions.

Of course, some of what we will get in response to our in-the-trenches questions will be baloney. But we will also gain some important insight--just as important, if not as packageable, as the insight we gain from studying the ICLM. We need all the insight we can get.

While I am meddling, let me raise a more personal question. What are the forces which shape our own perception of our role? What do we read, for example, that we understand to shed light on the institution, its dynamics and opportunities? Most of us would list such publications as The Journal of Higher Education, the Chronicle, Change magazine, the proceedings of professional meetings, maybe Educational and Psychological Measurement. But what about Rufus Miles' Awakening from the American Dream? Or Herman Kahn's opposite approach, The Next 200 Years? The Futurist magazine? Joseph Heller's Something Happened or Gail Sheehy's Passages: Predictable Crises of Adult Life? Theodore Roszak's Unfinished Animal? Even though none of these are directed toward colleges and universities, much less institutional research, I have a strong feeling that they can serve us as well in providing perspective--in interpreting and putting into context some of the forces and trends that are moving under our institutional noses. Our perspective is the thing, for out of it will grow our questions, processes, and approaches.

Before I close, I think it is fair to ask "why institutional research?" Why not the office of the chief executive or the academic dean or vice president? I would not argue for a moment that these officers have no responsibility along the lines I have indicated. But if I know anything about the work load and demands placed on these people, I would guess that they have just about all they can say grace over. The function I have tried to suggest is too large and too important to place as an "add-on" in the hopper of an already overworked executive.

Who else, then, might be responsible? Ideally everybody. But it seems reasonable to me to look especially to that arm of the institution that has traditionally assumed the function of illuminating, of drawing sense out of trends of analyzing, explaining, questioning. My thesis is not that we need to abandon our conventional role but that we must expand our interpretation of that role and review its historic emphases and methods. If we are successful, I am convinced that institutional research can be instrumental in giving direction during a time when every assumption, priority, issue, and approach in higher education bears reexamination.

But it will not be easy, and our imagination will be sorely taxed. The task will be complicated by the fact that we have a fine, useful tradition, and the finest traditions are the most difficult to lay aside. As one writer said:

> We are never completely contemporaneous with our present. History advances in disguise: it appears on stage wearing the mask of the preceding scene, and we tend to lose the meaning of the play. Every time the curtain rises, continuity has to be reestablished. The blame, of course, is not history's but lies in our own vision, encumbered with memory and images learned in the past. We see the past superimposed on the present, even when the present is revolution.

What is the "meaning of the play?" And what is our role now that the play moves on?

REPORT CARD 5 - FUNCTIONAL MODELS OF INSTITUTIONAL RESEARCH
... FOR SPECIAL INTEREST PURPOSES
* * * * * * * * *

GETTING AN INSTITUTIONAL RESEARCH OFFICE STARTED

Edwin R. Chapman
Dean of Planning and Development
Western Piedmont Community College

We all accept the idea that the functions of an institutional research office are important. Seneca the Roman statesman said two thousand years ago, "for he who knoweth not to which port he headeth all winds are unfavorable". Hopefully IR can help us to know where we are headed. The initial role of an IR office in the effective function of a college or university cannot be over emphasized. With tight budgets and the further need for planning, research will become increasingly important.

Institutional research provides information or data necessary for administrative decisions. The studies made on campus are designed to improve the college or its programs or operations. The over-all purpose of an institution can best be served if the office of IR assist individuals, groups, departments, and by supporting others in carrying out studies rather than trying to take them over completely.

In order to establish an effective program of institutional research certain principles should be considered. These principles include:

1. Formulate a basic philosophy of IR which projects the creative and dynamic spirit of curiosity.
2. Provide the specific and adequate financial support needed for IR.
3. Assign the responsibility for coordination of IR.
4. Establish a staff advisory committee.
5. Encourage faculty members and others to study problems associated with their work and responsibilities.
6. Supply expert assistance and in-service training for those who are working on studies.
7. Provide the facilities and staff assistance necessary for the conduct of studies.
8. Provide appropriate files for research studies and materials.
9. Encourage the use of research findings in a concerted and systematic way.

10. Recognize those who engage in IR.

11. Cooperate with appropriate agencies in the planning and conducting of studies.

12. Share data and research findings with other agencies.

Many areas of inquiry are appropriate for study by the institutional researcher. Goals may include a study of the adequacy of statements of purposes, the organization of a college to achieve its goals, or the relationship of plans for the future with stated purposes. Students, could include enrollment trends and projections, changes in student profile with implications for recruitment or methods of teaching etc., or attrition studies, follow up studies, and relationship of education to actual jobs to name just a few areas. Faculty studies may include characteristics, working conditions, productivity, teaching methods, opinions, and others. Curriculum studies are concerned with the relation of curricula to goals of the college, relevance of course offerings to various segments of student population, the inclusion of new knowledge, course content and structure or the use of learning resources by both faculty and students. Facilities studies encompass utilization with request for additional space, relation of room size to scheduling, nature of space needs, and priorities established for new construction. Administration may involve a consideration of functions to policies or procedures, relationship of authority to responsibility, other ways that affect goals of the college. Also the many aspects of finance and even public relations are fertile areas for institutional research.

From the above it is evident that IR can and does pervade the many recesses of a college environment. The overall purpose is to improve the operations and effectiveness of services and/or functions. Thus the uses of research information are many. Some of these uses are:

1. Establishing goals.

2. Administrative decisions.

3. Establishing policies and procedures.

4. Curriculum planning.

5. Planning for future needs.

6. Improving instruction.

7. Evaluation of faculty.

8. Admissions.

9. Preparing for accreditation.

10. Improving articulation.

11. Preparing the budget.

12. Improving public relations.

Summary and Conclusions

All colleges and universities need an office of institutional research in order to determine where they are headed. This information serves not only as an input into decision making but is of great value in long range planning. The uses of research data are myriad but all directed toward improving both the efficiency and effectiveness of the services offered in institutions of higher education.

INSTITUTIONAL RESEARCH AND THE COLLEGE BOARD

* * * * * * * * *

Stephen H. Ivens
Southern Regional Office
College Entrance Examination Board

The institutional research services of the College Entrance Examination Board can generally be categorized into the areas of admissions planning and financial aid planning. In addition, tailored services for institutions are available either through the College Board alone or in conjunction with Educational Testing Service.

Admissions and recruitment have historically been associated with activities of the College Board. The Admissions Testing Program (ATP) and its most widely known component, the Scholastic Aptitude Test (SAT), form the basis for a series of services that may benefit institutional researchers. Marketing research which may entail the study of student needs, pattern of attendance, institutional image, recruitment activity, and admissions yield are among the areas aided by the summary reports produced by the College Board for individual institutions and systems of institutions. The capability of accessing student data banks through computer terminals in the regional offices insure rapid response to institutional inquiries about student trends.

The development of student budgets, the effect of price increases on student financial aid needs, and the development and justification of institutional applications for federal capital contributions, are among the areas for which the College Scholarship Service of the College Board may assist institutions. These services are available through the use of financial aid documents filed by parents and students with the College Scholarship Service and through the use of survey instruments that can be administered on campus.

The College Board has also developed computer software to assist individual and institutional users of College Board programs and services. These range from a generalized questionnaire analysis program to a financial aid management information system.

Inquiriesconcerning admissions and financial aid services, along with specialized capabilities should be directed to the Southern Regional Office, Suite 200, 17 Executive Park Drive, N.E., Atlanta, Georgia 30329.

APPENDIX A
* * * * * * * *

CONSTITUTION AND BYLAWS
FOR THE
NORTH CAROLINA ASSOCIATION FOR INSTITUTIONAL RESEARCH

(Ratified, January, 1973)
(Revised, November, 1976)

ARTICLE I NAME

The name of the Association shall be the North Carolina Association for Institutional Research.

ARTICLE II PURPOSES

The major purposes of this Association shall be: (1) to provide for professional development; (2) to provide for the dissemination of information and the interchange of ideas on problems of common interest; (3) to contribute to the advancement of post secondary education in its fullest and broadest implications; and (4) to foster a friendly spirit of unity and cooperation among persons having interests and activities related to institutional research.

ARTICLE III MEMBERSHIP

There shall be the following three categories of membership: individual membership, institutional membership and organizational membership. Each category of membership shall have only one vote.

Section 1. Individual Membership shall be open to any person engaged in institutional research, or who has interests and activities directly related to institutional research.

Section 2. Institutional Membership shall be open to any post secondary educational institution.

Section 3. Organizational Membership shall be open to any professional organizational or educational organization with interests and activities related to institutional research.

ARTICLE IV OFFICERS

Section 1. Officers - The officers of the Association shall consist of the President, the Vice-President, the Secretary, and the Treasurer.

Section 2. Duties of Officers

President - The President shall: (a) serve as Chairman of the Executive Committee and preside at all meetings of

the Association; (b) represent the Association or provide for appropriate representation for the Association at national, regional, and local conferences or meetings of interest to the Association; (c) act as spokesman for the Association; (d) have general responsibility for promoting membership in the Association; (e) appoint committee members; and (f) perform any other duties necessary to assist the Association in achieving its purposes as stated in the Constitution.

President-elect - The President-elect shall: (a) perform all of the duties of the President in the absence of that officer; (b) assist the President; (c) serve as Chairman of the Program Committee for the annual meeting; (d) perform other assignments which may be delegated by the President; (e) assume the duties of the President in the event that an unexpired term of the presidency occurs; and (f) assume the office of Presidency at the end of the President's term.

Secretary - The Secretary shall: (a) keep and publish annually an accurate listing of the members of the Association and provide a list of active members during the annual meeting; (b) keep the minutes of the annual meeting and the meetings of the Executive Committee; and (c) shall have the responsibility for printing and distributing at the earliest possible time, the proceedings of the annual meeting.

Treasurer - The Treasurer shall: (a) collect annual dues; (b) provide the payment of duly authorized expenses of the Association; (c) prepare formal financial statements for the Executive Committee meetings and annual meeting; and (d) perform any other duties assigned by the President.

Section 3. Term of Officers

The term of officers shall be one year. All officers shall assume office at the close of the annual meeting at which elected and serve until the close of the annual meeting coinciding with the completion of the term for which they are elected.

Succession - The Secretary and Treasurer are eligible to succeed self, not more than two consecutive times, in the same office.

Section 4. Election of Officers

All officers shall be elected at the annual meeting by a majority vote of those members present and voting. Voting shall be by written ballot.

ARTICLE V EXECUTIVE COMMITTEE

Section 1. Composition

The Executive Committee shall be composed of the President-elect, Secretary, Treasurer, the immediate Past President, and two Members at large elected by the membership. The President shall be the Chairman.

Section 2. Duties

(a) The Executive Committee shall have the general supervision of the affairs of the Association between its annual meetings, fix the hour and place of meetings, make recommendations of the Association, and perform such other duties as are specified in the ByLaws; (b) the Executive Committee shall function as the Budget Committee; and (c) in addition, shall pose questions with the President on important policy matters.

Section 3. Vacancies

Unless otherwise provided for in the Constitution, the Executive Committee shall have the authority to fill any vacancy by appointment for the unexpired term. Any individual appointed by an unexpired term shall be eligible to succeed himself and to serve a full elective term as provided for in the Constitution.

ARTICLE VI BYLAWS

The Association shall adopt ByLaws for the conduct of its affairs not inconsistent with this Constitution. Such ByLaws may be adopted, repealed, or amended at any annual meeting of the Association by a majority of the members present and voting, provided that the proposed amendment to the ByLaws shall have been circulated at least 30 days prior to the annual meeting.

ARTICLE VII AMENDMENTS

This Constitution may be amended at any annual meeting by a 2/3 vote of members present, provided the substance of the proposed amendment shall have been submitted 30 days prior to the meeting in the call of the meeting.

Section 1. Meetings

The purpose of the Association will be served by annual meetings, special meetings, and executive committee meetings. (a) The Annual Meeting of the Association shall be held during November of each year on a date determined

by the Executive Committee; (b) Special Meetings of the Association may be called by the Executive Committee, or by petition of ten percent (10%) of the active membership; and (c) the Executive Committee shall meet twice, once in December following the annual meeting (Budget Meetings) and at another time so designed by the President. Special Meetings of the Committee can be called by the President.

Section 2. Membership Dues

There shall be two categories of dues, individual and institutional/organization. Annual dues for the individual membership shall be five dollars ($5) payable upon acceptance of membership. Annual dues for institutional/organizational members shall be twenty-five ($25) payable upon acceptance of membership. Dues are due at each annual meeting and must be paid by September 30 for a member to have active status at the annual meeting. The dues year is from the date of each annual meeting to the next annual meeting.

Section 3. Voting

For voting purposes, each member, individual or institutional, shall have one vote. Individual members are entitled to one vote. Organizational and Institutional members are entitled to one vote cast by a designated representative of the organization or institution.

Section 4. Fiscal Year

The fiscal year of the Association will be from January 1 through December 31.

Section 5. Committees

A. A Nominating Committee of at least three members shall be appointed by the President no later than October 5 for each annual meeting.

B. A Committee on Program and Local Arrangements shall be appointed by the President for each annual meeting.

C. An Auditing Committee shall be appointed by the President for each annual meeting. This committee shall audit the Treasurer's books for the preceding year.

D. The Membership Committee shall be appointed by the President.

E. Such other Committees as deemed necessary for the welfare of the Association may be appointed by the President.

Section 6. Quorum

A quorum to conduct the business of the Association shall consist of 25% of the active membership.

Section 7. Procedure

The latest edition of Robert's Rules of Order shall govern all meetings of the Association insofar as they are applicable and not inconsistent with the Constitution and By-Laws of the Association.

Section 8. Amendments

These ByLaws may be amended in any annual meeting by by a majority vote of members present and voting provided the substance of the proposed amendment shall have been submitted 30 days prior to the meeting, in the call meeting, or at the previous meeting.

APPENDIX B
* * * * * * * * *

NCAIR

SUPPLEMENTAL FINANCIAL REPORT*

Annual Meeting
November 3-4, 1976

RECEIPTS	No.			
Registration (@$10.00)	66	$660.00		
Dinner (@ $5.00)	49	245.00		
Membership (@ $5.00)	58	290.00		
			+	$1,195.00
DISBURSEMENTS				
Holiday Inn				
Coffee & Cookies (3 breaks)		$ 86.70		
Dinner (Paid for 55)		455.68		
Social Hour (@ $.75/person)		49.33		
Bartender		5.20		
		$596.91		
Social Hour (Supplies)		41.20		
			-	638.11
				$ 556.89
Evans Harris (ECU)		$ 34.32		
Tom Stafford		19.96		
Jim Firnberg		231.89		
Memorandum to Newcomers in IR (50)		50.00		
Program Printing		25.85		
Postage		40.32		
Phone Calls		44.22		
			-	446.56
BALANCE				$ 110.33

(TOTAL COST $1,084.67)

71

*Note: Submitted by Ben M. Seelbinder and audited by Ralph B. Kornegay.

APPENDIX C

* * * * * * * * *

1977 NORTH CAROLINA ASSOCIATION FOR INSTITUTIONAL RESEARCH DIRECTORY

Directory of Individual Members

(As of April 1, 1977)

Fleet D. Allen
Director of Research
Sandhills Community College
Route 5, Box 18
Carthage, NC 28327
(919) 692-6185 Ext. 19
*Areas: O

Marcus D. Allred
Director, Institutional Planning
N. C. Department of Community Colleges
Edenton Street
Raleigh, NC 27601
( )
Areas: A, B

Edwin C. Anderson
Director of Computer Services
Guilford College
5800 West Friendly Avenue
Greensboro, NC 27410
(919) 292-5511 Ext. 139
Areas: J

Linda F. Balfour
Social Research Associate
UNC-General Administration
P. O. Box 2688
Chapel Hill, NC 27514
(919) 933-6981 Ext. 257
Areas: G, P, U

Charles M. Beattie
Director of Institutional Research
Livingstone College
701 West Monroe Street
Salisbury, NC 28144
(704) 633-7960 Ext. 37
Areas: A, O, P

W. Archie Blount
Director, Institutional Research
N. C. A & T State University
Room 102, Dudley Building
Greensboro, NC 27411
(919) 379-7797
Areas:

Rebecca E. Bostic
Research Analyst
Central Piedmont Community College
Box 4009
Charlotte, NC 28204
(704) 373-6617
Areas: O

Cecil C. Brooks
Associate Director, Institutional
Studies & Planning
Western Carolina University
Cullowhee, NC 28723
(704) 293-7239
Areas: I, L. M, N

Dalton P. Brooks
Director, Institutional Research
Pembroke State University
Rt. 2, Box 375-A
Pembroke, NC 28372
( )
Areas: B

Charles I. Brown
Associate Professor of Education
Fayetteville State University
Fayetteville, NC 28301
(919) 486-1182
Areas: G

Ollie W. Burrell
Statistical Analyst
UNC-General Administration
P. O. Box 2688
Chapel Hill, NC 27514
(919) 933-6981
Areas: P

Edwin R. Chapman
Dean, Planning & Development
Western Piedmont Community College
Morganton, NC 28655
(704) 437-8688 Ext. 212
Areas: B, C, D

Kathryn A. Council
Research Assistant
N. C. State University
204 Peele Hall
Raleigh, NC 27607
(919) 737-2776
Areas: G, J, L, M

Harriette M. Crump
Educational Development Officer
Halifax Community College
P. O. Drawer 809
Weldon, NC 27870
(919) 536-4152 Ext. 22
Areas: B, I

John B. Davis, III
Programmer
UNC-General Administration
P. O. Box 2688
Chapel Hill, NC 27514
(919) 933-9681
Areas: Q

Preston G. Davis
Statistical Research Assistant
UNC-Wilmington
P. O. Box 3725
Wilmington, NC 28401
(919) 791-4330 Ext. 329
Areas: P

Francenia S. Deskins
Director, Student Research Services
Appalachian State University
219 Workman Hall
Boone, NC 28607
(704) 262-2210
Areas: G

Nancy C. Dolin
Research Assistant
N. C. State University
204 Peele Hall
Raleigh, NC 27607
(919) 737-2776
Areas: O

Wanda B. Fisher
Coordinator of University Studies
UNC-Charlotte
UNCC Station
Charlotte, NC 28223
(704) 597-2431
Areas: C, F, G, U

Robert E. Fry
Director, Institutional Research
UNC-Wilmington
P. O. Box 3725
Wilmington, NC 28401
(919) 791-4330 Ext. 329
Areas: F, J, L, Q

James E. Garner
Director of Admissions and Institutional Research
Greensboro College
Greensboro, NC 27420
(919) 272-7102 Ext. 215
Areas: I

Patricia E. Gaynor
Manager, Institutional and Academic Research
Appalachian State University
Computer Center
Boone, NC 28607
(704) 262-2140
Areas: O, Q

William H. Gilmore
Assistant Director
N. C. State Commission on Higher Education Facilities
Raleigh, NC 27611
(919) 829-3266
Areas: F

Ted W. Goodman
Director, Institutional Research
Catawba College
Salisbury, NC 28144
(704) 637-4111 Ext. 4397
Areas:

Zebulon Z. Hadley, III
Dean
Sampson Technical Institute
Box 318
Clinton, NC 28328
(919) 592-8081
Areas: D, F

Neal F. Hardison
Dean, Learning Resources
Sampson Technical Institute
P. O. Box 318
Clinton, NC 28328
(919) 592-8081 Ext. 250
Areas: B, M

Kenneth L. Harper
Director of Administrative
Services & Registrar
Elon College
Box 2106
Elon College, NC 27244
(919) 584-9711 Ext. 215
Areas: B, N

Evans C. Harris, Jr.
Administrative Programmer
East Carolina University
Computer Center
Greenville, NC 27834
(919) 757-6559 Ext. 8
Areas: Q

Cyril H. Harvey
Academic Dean
Guilford College
5800 Friendly Avenue
Greensboro, NC 27410
(919) 292-5511 Ext. 45
Areas:

Robert L. Hester, Jr.
Director, Institutional Research
N. C. A & T State University
Greensboro, NC 27411
(919) 379-7797
Areas: C, F, I, N

Robert F. Hill, Jr.
Computer Programmer
UNC-General Administration
P. O. Box 2688
Chapel Hill, NC 27514
(919) 933-6981 Ext. 262
Areas: C, G

Sally M. Horner
Director, Institutional Research
Meredith College
Raleigh, NC 27611
(919) 833-6461 Ext. 213
Areas: C, D, E, H, U

Jean S. Huryn
Research Associate
East Carolina University
Institutional Research
Greenville, NC 27834
(919) 757-6288
Areas: F

Carl H. Johnson
Systems Analyst
UNC-Chapel Hill
440 West Franklin Street
Chapel Hill, NC 27514
(919) 929-0416 Ext. 249
Areas: F, G

Mark H. Johnson
Programmer
UNC-General Administration
P. O. Box 2688
Chapel Hill, NC 27514
(919) 933-6981 Ext. 258
Areas: Q

T. Earle Johnson, Jr.
Director, Institutional Advancement
Piedmont Technical Institute
P. O. Box 1197
Roxboro, NC 27573
(919) 599-1181 Ext. 23
Areas: B, R

Larry G. Jones
Associate Director, Institutional
Research & Planning
University of Georgia
310 New College
Athens, GA 30602
(404) 542-8832
Areas: A, B, C, D, E, G, H, I,
J, K, L, M

Musa Kamara
N. C. A & T State University
Institutional Research
312 North Dudley
Greensboro, NC 27411
(919) 379-7977
Areas: Q

Mildred E. Knox
Institutional Research
Winston-Salem State University
Winston-Salem, NC 27102
(919) 761-2176
Areas:

Ralph B. Kornegay
Director, Institutional Research
Winston-Salem State University
Blair Hall
Winston-Salem, NC 27102
(919) 761-2176
Areas: A, G

Lillian Y. Lehman
Registrar & Director of
Institutional Research
UNC-Chapel Hill
02 South Building 005A
Chapel Hill, NC 27514
(919) 933-3071
Areas: C, I, J, L, M, N

Robert Lewis
Development and Institutional
Research
Norfolk State College
2401 Corprew Avenue
Norfolk, VA 23504
(804) 623-8683
Areas:

Walter A. McDaniel
Director, Research & Evaluation
Southeastern Community College
Box 151
Whiteville, NC 28472
(919) 642-6356
Areas: B, C, D, G, J, L, M, N

James R. Montgomery
Director, Institutional Research
Virginia Polytechnical Institute
Burrus Hall
Blacksburg, VA 24061
(703) 951-6994
Areas: B

Willie J. Mooring
Systems Analyst
N. C. A & T State University
Computer Center
Greensboro, NC 27411
(919) 379-7856
Areas: B, F

Dianna B. Morris
Assistant Director
Office of Institutional Research
East Carolina University
Greenville, NC 27834
(919) 757-6288
Areas: B, C, F, O

Vietta M. Neal
Director, Institutional Research
Johnson C. Smith University
Charlotte, NC 28216
(704) 372-2370 Ext. 295
Areas:

James O. Nichols
Director, Institutional Research &
Planning
Marshall University
Huntington, WV 25705
(304) 696-3648
Areas: S

James Olliver
N. C. Association of Independent
Colleges & Universities
1307 Glenwood Avenue
Suite 165
Raleigh, NC 27605
(919) 832-5818
Areas:

Lyle F. Pepino
Director, Institutional Research
Guilford Technical Institute
P. O. Box 309
Jamestown, NC 27282
(919) 292-1101 Ext. 328
Areas:

Mark L. Perkins
Assistant Director, Institutional
Studies
Old Dominion University
Norfolk, VA 23508
(804) 489-6566
Areas: B, O, P

Linda K. Pratt
Research, Evaluation, & Planning
N. C. Central University
Education Building
Durham, NC 27707
(919) 683-6367
Areas: A

Rowland S. Pruette
Director, Institutional Research
Chowan College
Murfreesboro, NC 27855
(919) 398-4101 Ext. 239
Areas: L, M

Donald J. Reichard
Director, Institutional Research
UNC-Greensboro
304 New Administration Building
Greensboro, NC 27412
(919) 379-5930
Areas:

Robert E. Reiman
Coordinator of Long-Range Planning
Appalachian State University
Geography Department
Boone, NC 28607
(704) 262-2026
Areas: T

William R. Richardson
Vice President
Wilkes Community College
Drawer 120
Wilkesboro, NC 28697
(919) 667-7136 Ext. 15
Areas:

Gordon W. Robinson
Director, Institutional Research & Planning
St. Augustine's College
Oakwood Avenue
Raleigh, NC 27611
(919) 828-4451 Ext. 314
Areas: T

Ben H. Romine
Director of Planning & University Studies
UNC-Charlotte
UNCC Station
Charlotte, NC 28223
(704) 597-2431
Areas: A, T

Timothy R. Sanford
Assistant Director, Institutional Research
UNC-Chapel Hill
02 South Building 005A
Chapel Hill, NC 27514
(919) 933-3071
Areas: B, G, I

Ben M. Seelbinder
Director, Records & Institutional Research
Wake Forest University
7344 Reynolda Station
Winston-Salem, NC 27109
(919) 561-5744
Areas: C

Lesley A. Shannon
University Studies Associate
UNC-Charlotte
UNCC Station
Charlotte, NC 28223
(704) 597-2431
Areas:

D. Elaine Sipe
Institutional Development
Sacred Heart College
North Main Street
Belmont, NC 28012
(704) 825-8886
Areas: T

Jeff E. Smith
Associate Director, Research, Evaluation, & Planning
N. C. Central University
Durham, NC 27707
(919) 683-6433
Areas: K, L, M

Ben Spangler
Assistant Professor of Education
ECU Graduate Resident Center
P. O. Box 179
Ft. Bragg, NC 28307
(919) 497-9173
Areas: P

Thomas H. Stafford, Jr.
Acting Vice-Chancellor for Student Affairs
N. C. State University
101 Holladay Hall
Raleigh, NC 27607
(919) 737-2446
Areas: G, I, J, L, M, N

Florence H. Steele
Vice President for Research & Administration
Francis Marion College
P. O. Box 7500
Florence, SC 29501
(803) 669-4121 Ext. 221
Areas: H, J

James F. Stephens
Registrar
St. Andrews Presbyterian College
Laurinburg, NC 28352
(919) 276-3652 Ext. 221
Areas:

Dorothy F. Sutton
Research Associate, Institutional Research
UNC-Greensboro
304 New Administration Building
Greensboro, NC 27412
(919) 379-5930
Areas:

Norman P. Uhl
Associate Vice Chancellor for Research, Evaluation, & Planning
N. C. Central University
Durham, NC 27707
(919) 683-6367
Areas: A, J, T

Robert M. Ussery
Director, Institutional Research
East Carolina University
Greenville, NC 27834
(919) 757-6288
Areas: B, F, G, J, L, M, N

Marjorie H. White
Administrative Officer
N. C. A & T State University
312 North Dudley Street
Greensboro, NC 27411
(919) 379-7797
Areas:

John D. Wilson
Systems Analyst
UNC-General Administration
P. O. Box 2688
Chapel Hill, NC 27514
(919) 933-6981
Areas: B, C

Julian C. Wingfield
Director, Operations Research & Information
Community College Fiscal Management Division, State Board of Education
460 Education Building
Raleigh, NC 27611
(919) 829-3426
Areas:

Kenneth L. Wood
Director, Institutional Studies & Planning
Western Carolina University
Cullowhee, NC 28723
(704) 293-7239
Areas: Q

*Areas of Special Competence in Institutional Research Codes follow:

A - Institutional Goals
B - Administrative
C - Faculty
D - Curriculum
E - Budgets
F - Space Utilization & Scheduling
G - Student Characteristics
H - Cost Analysis
I - Recruitment & Admissions
J - Predictions & Academic Performance
K - Perception of College Environment
L - Retention
M - Attrition
N - Transfer
O - Research
P - Statistics
Q - Data Processing
R - Technical Writing
S - NCHEMS Implementation
T - Long-range Planning
U - Enrollment Trends

1977 NORTH CAROLINA ASSOCIATION FOR INSTITUTIONAL RESEARCH DIRECTORY

Directory of Institutional Members (and official representatives)

(As of 4/1/77)

Barber-Scotia College
Koosappa Rajasekhara
Office for Institutional Research
Concord, NC 28205
(704) 786-5171 Ext. 239

East Carolina University
Robert M. Ussery
Director, Institutional Research
Greenville, NC 27834
(919) 757-6288

Fayetteville State University
Barbara D. Holmes
Director, Institutional Research & Planning
Newbold Station/Murchison Road
Fayetteville, NC 28301
(919) 483-6144 Ext. 355

Livingstone College
Charles M. Beattie
Director of Institutional Research
701 West Monroe Street
Salisbury, NC 28144
(704) 633-7960 Ext. 37

N. C. State University
Thomas H. Stafford, Jr.
Acting Vice Chancellor for Student Affairs
101 Holladay Hall
Raleigh, NC 27607
(919) 737-2446

Saint Augustine's College
Gordon W. Robinson
Director of Institutional Research & Planning
Oakwood Avenue
Raleigh, NC 27611
(919) 828-4451 Ext. 314

Stanly Technical Institute
J. C. Boone
Assistant to the President
Route 4, Box 5
Albemarle, NC 28001

CONTRIBUTORS AND PROGRAM PARTICIPANTS

* * * * * * * * *

Allen J. Barwick, Coordinator Institutional Research, UNC-General Administration

Nancy L. Beck, Associate Director, Institutional Research for Higher Education, Educational Testing Service

Edwin R. Chapman, Dean, Planning and Development, Western Piedmont Community College

James W. Firnberg, President, Associate for Institutional Research, Coordinator of Institutional Research-Louisiana State University

Robert E. Fry, Director, Institutional Research, University of North Carolina-Wilmington

Henry E. Frye, North Carolina Representative from Guilford County and Member of the House Committee on Higher Education

Evans C. Harris, Administrative Programmer, East Carolina University Computing Center

Cyril H. Harvey, Academic Dean, Guilford College

Steve H. Ivens, Southern Regional CEEB Office, Atlanta, Georgia

Dianna B. Morris, Assistant Director Office of Institutional Research, East Carolina University

Mark L. Perkins, Assistant Director, Institutional Studies, Old Dominion University

Ralph B. Kornegay, Director, Institutional Research, Winston-Salem State University

William Lunceford, Southeastern Regional ACT Office, Atlanta, Georgia

Koosappa Rajasekhara, Coordinator, Barber-Scotia College

Donald J. Reichard, Director, Institutional Research, UNC-Greensboro

Robert E. Reiman, Coordinator of Long-Range Planning, Appalachian State University

William Richardson, Vice President, Wilkes Community College

Ben H. Romine, Director of Planning and University Studies, UNC-Charlotte

Kathy Sebo, North Carolina State Senator from Guilford County, Faculty Member, Guilford College

Ben M. Seelbinder, Director, Records, and Institutional Research, Wake Forest University

Thomas H. Stafford, Jr., Acting Vice-Chancellor for Student Affairs, North Carolina State University

Norman P. Uhl, Associate Vice Chancellor for Research, Evaluation, and Planning, North Carolina Central University

Robert M. Ussery, Director, Institutional Research, East Carolina University